TRANSPORTATION CABINET
Department of Highways
Frankfort, Kentucky 40622

PROPOSAL NO. _____
PROJECT CODE NO. 03-0255

LETTING OF APRIL 25, 2003
Sealed Bids will be received in the Division of Contract Procurement and/or the Auditorium located on the 1st Floor of the State Office Building until 10:00 A.M., EDT, on APRIL 25, 2003 Bids will be publicly opened and read at 10:00 A.M., EASTERN DAYLIGHT TIME.

PROJECT IDENTIFICATION AND DESCRIPTION:

FD GR 03 0000113, BARREN-METCALFE-RUSSELL-PULASKI COUNTIES

Toll Plaza Removal, Asphalt Pavement Rehabilitation and Signing.

Status Report Item No. 3-318.00.

(8)

GEOGRAPHIC COORDINATES:
LATITUDE - 37° 00' NORTH
LONGITUDE - 85° 55' WEST

COMPLETION DATE ESTABLISHED FOR PROJECT: AUGUST 28, 2003

LIQUIDATED DAMAGES SEE STANDARD SPECIFICATIONS

REQUIRED BID PROPOSAL GUARANTY: Not less than 5% of the total bid.

(Check guaranty submitted: Cashier's Check |__| Certified Check |__| Bid Bond |__|)

BID BONDS WHEN SUBMITTED WILL BE RETAINED WITH THE PROPOSAL.
INDEX OF CONTENTS

BID..... |__| PROPOSAL ISSUED TO: _____

SPECIMEN..... |__| _____
Address City State Zip

PART I

SCOPE OF WORK

1. Project Detail

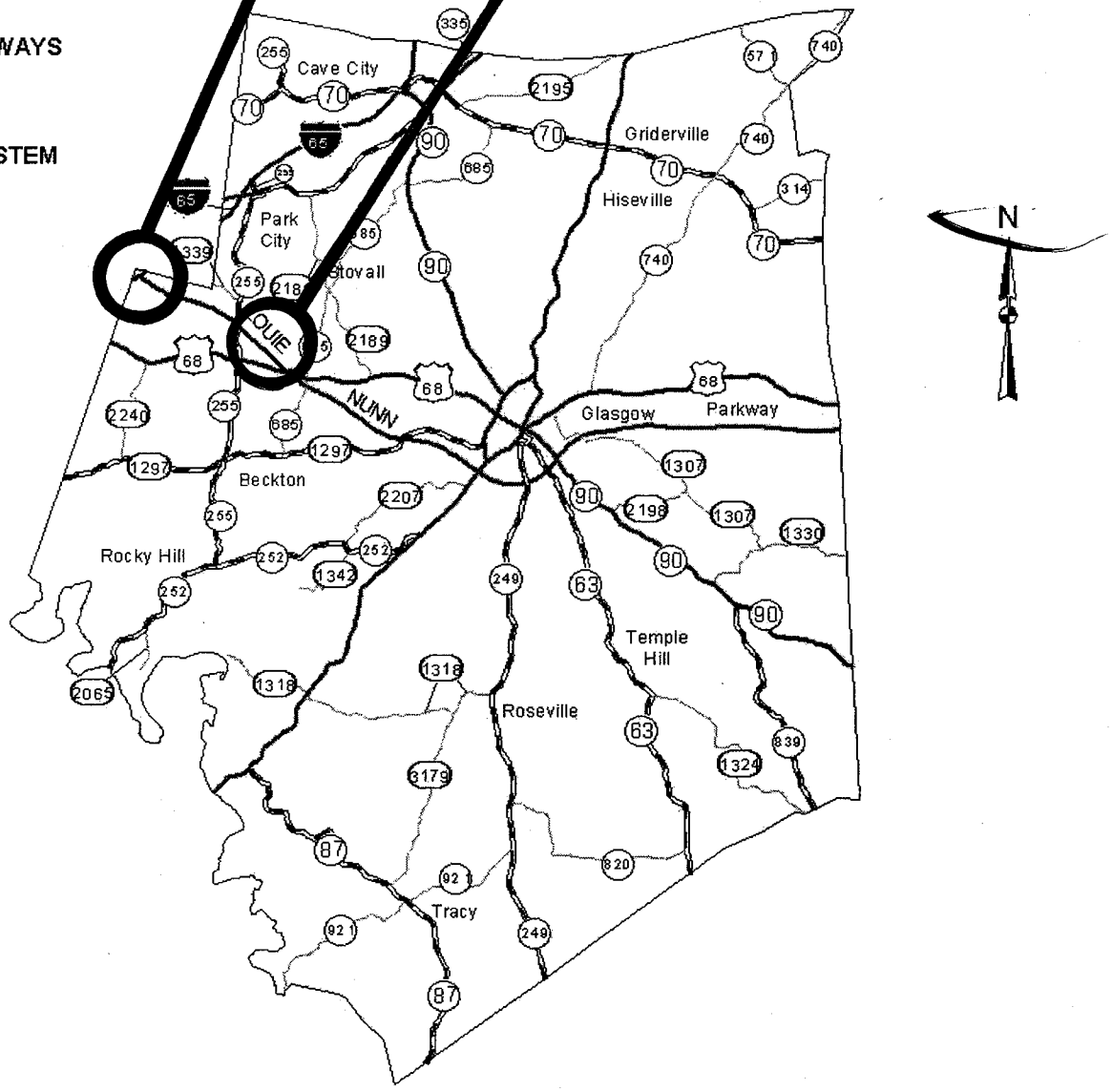
a. See Sketches (4 Sheets), Description Summary, Material Summary and Detail	Attached
b. Special Notes Applicable to Project	Attached
c. Supplemental Specifications	Attached
d. Special Note for Asphalt Milling and Texturing	Attached
e. Special Note for Installation of Pavement Markers	Attached
f. Special Note for Toll Plaza Removal and Signing	Attached
g. Special Notes and Drawings for Barren County	Attached
h. Special Notes and Drawings for Metcalfe County	Attached
i. Special Notes and Drawings for Russell County	Attached
j. Special Notes and Drawings for Pulaski County	Attached
k. Special Notes and Drawings for Signing	Attached
l. Special Note for Variable Message Signs (4-18-2001)	Attached
m. Special Note for Roadbed Stabilization at Bridge Ends (1-1-2000) **[2E]**	*

* These Special Notes are included in the Supplemental Specifications.

F004 005-0065-042-045

F004 005-9008-002-005

DEPARTMENT OF HIGHWAYS
MAP OF
BARREN COUNTY
SHOWING
STATE MAINTAINED SYSTEM



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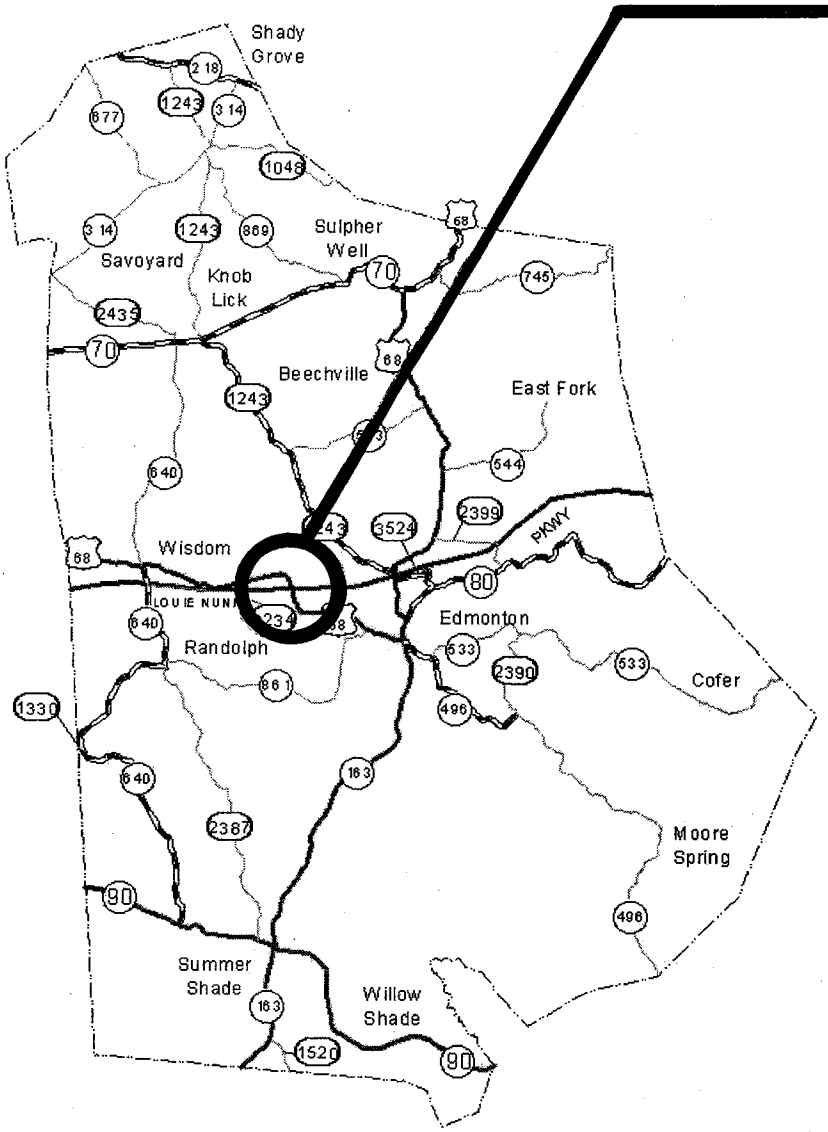
FD04 085-9008-026-029

DEPARTMENT OF HIGHWAYS
MAP OF
METCALFE COUNTY
SHOWING
STATE MAINTAINED SYSTEM



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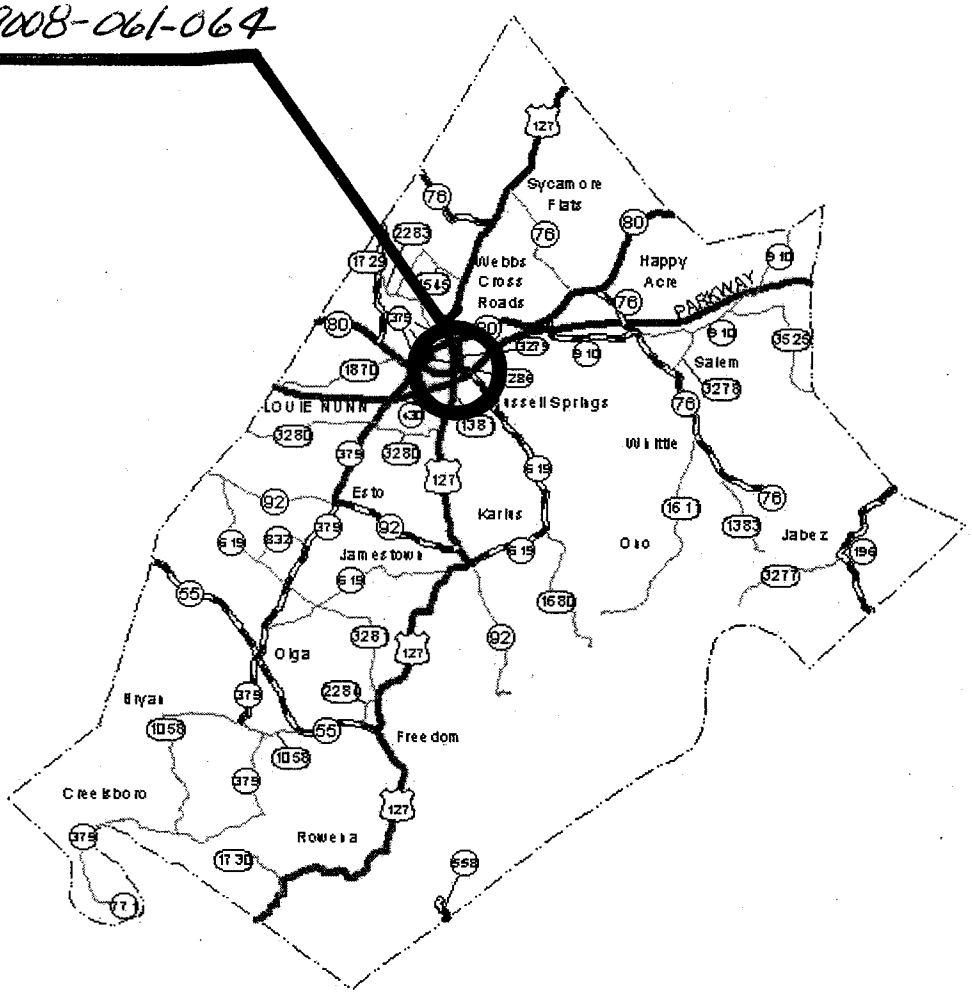
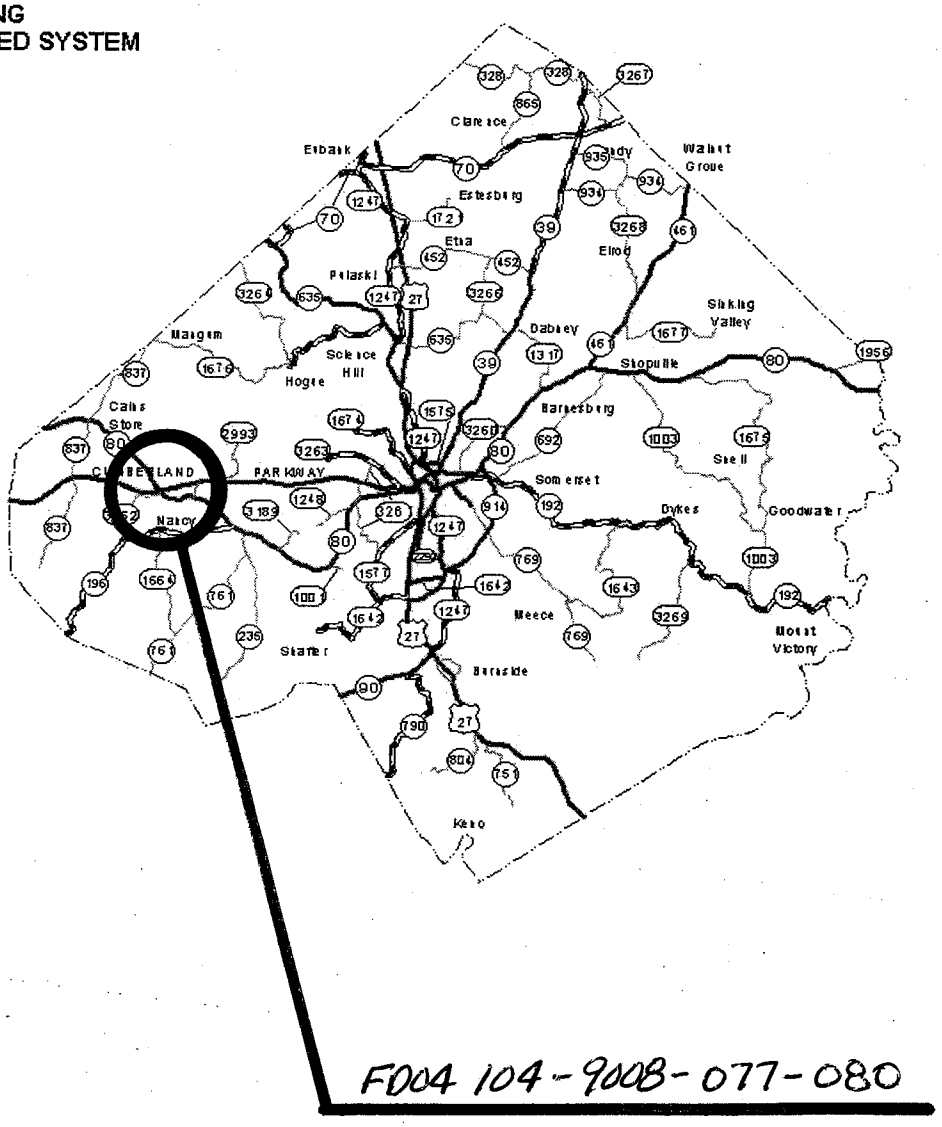
(21)

Russell County

FDOA 104-9008-061-064



DEPARTMENT OF HIGHWAYS
MAP OF
PULASKI COUNTY
SHOWING
STATE MAINTAINED SYSTEM



FD04 104-900B-077-080

FD GR 03 0000113, VARIOUS COUNTIES DESCRIPTION SUMMARY

COUNTY	PROJECT NUMBER	DESCRIPTION	LENGTH MILES	WIDTH FEET	AREA SQ YD	ADT
Barren	FD04 005 9008 002-005	1. The Cumberland Parkway (PW 9008) from 1.000 mile west of Bon Ayr Toll Plaza (MP 2.100) extending easterly to 1.000 mile east of Bon Ayr Toll Plaza (MP 4.100).	2.000	100	11733	6500
Metcalfe	FD04 085 9008 026-029	2. The Cumberland Parkway (PW 9008) from 1.000 mile west of US 68 (MP 26.400) extending easterly to 1.000 mile east of US 68 (MP 28.400).	2.000	VAR	1800	5001
Russell	FD04 104 9008 061-064	3. The Cumberland Parkway (PW 9008) from 1.234 miles west of US 127 Underpass (MP 61.185) extending easterly to 1.281 miles east of US 127 Underpass (MP 63.700).	2.515	24	38952	5000
Pulaski	FD04 100 9008 077-080	4. The Cumberland Parkway (PW 9008) from 1.000 mile west of KY 80 (MP 77.350) extending easterly to 1.200 mile east of KY 80 (MP 79.550).	2.200	24	18524	0
Barren	FD04 005 0065 042-045	5. The Louisville-Nashville Road (I-65) from 2.000 miles south of Cumberland Parkway Interchange (MP 41.000) extending northerly to 2.000 miles north of Cumberland Parkway Underpass (MP 45.100), a distance of 2.100 miles.	0.000	0	0	0
		TOTAL	8.715	0	71009	0

MATERIAL SUMMARY

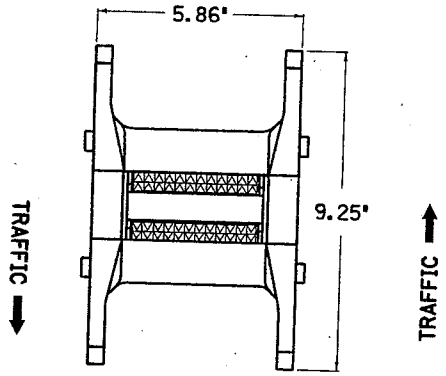
CODE	DESCRIPTION	UNIT	BARREN	METCALFE	RUSSELL	PULASKI	BARREN	TOTAL
9863	MEDIAN GRADING	LS			1			1
9864	RESHAPE SHOULDER	LS				1		1
8100	CONCRETE-CLASS A	CY		5	113	1		119
8150	STEEL REINFORCEMENT	LB			1088			1088
2351	G/R-STEEL W BEAM--S F	LF		550				550
2367	G/R END TREAT TY 1	EA		2				2
2369	G/R END TREAT TY 2A	EA		2				2
2381	REMOVE G/R	LF	900	900		35		1835
2929	CRASH CUSHION TY IX	EA		2				2
2888	CRASH CUSHION TY VI D	EA			4			4
6511	PAVE STRPG-TEMP PAINT-6"	LF	2055	500	6500			9055
6515	PAVE STRPG-PERM PAINT-6"	LF	2055	1000	13000	150		16205
6550	PAVE STRPG-TEMP REM TAPE-W	LF		4000	500			4500
6551	PAVE STRPG-TEMP REM TAPE-Y	LF		4000	500			4500
6592	PAVE MARK TY- B W/R	EA	6	40	80			126
2775	FLASHING ARROW	EA	2	2	2			6
2671	VAR MESS SIGN-PORT 3 LINE	EA	2	2	4	2		10
2562	SIGNS	SF	400	400	400	300		1500
2653	LANE CLOSURES	EA	4	4	4			12
2014	BARRICADE TY 3	EA	6	6	4			16
2107	BREAK AND SEAT PAVEMENT	SY			1650			1650
2625	REM HEADWALL	EA			1			1

MATERIAL SUMMARY

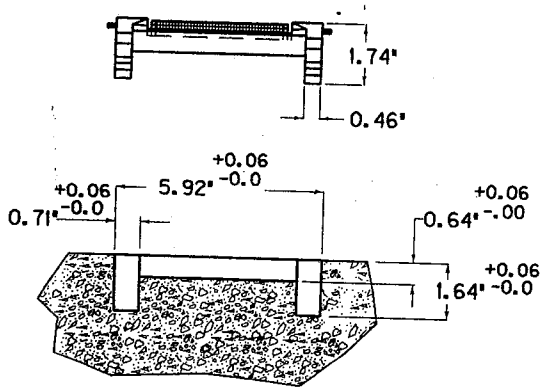
CODE	DESCRIPTION	UNIT	BARREN	METCALFE	RUSSELL	PULASKI	BARREN	TOTAL
1310	REM PIPE	LF			40			40
2721	REM CONC SIDEWALK	SY			30			30
2091	REM PAVEMENT	SY	1080					1080
6600	REM PAVE MARK TY V	EA	6		80			86
2058	REM PCC PAVEMENT	SY	2345	1860				4205
9861	REM CANOPY	EA	1			2		3
9862	REM TOLL BOOTH	EA	4	4	6	2		16
9865	REM SIGNS	EA	9	4	6	2		21
9867	REM TRAFFIC CONTROL TREADLE	EA		4	10	2		16
9868	REM CROSSOVER	EA		2				2
4940	REM LIGHTING	LS			1			1
4940	REM LIGHTING	LS				1		1
1000	PERF PIPE--4"	LF	150	150				300
1010	NON-PERF PIPE--4"	LF	50	50				100
1028	PERF PIPE HDWL TY 3-4"	EA	4	4				8
1791	ADJ MANHOLE FRAME TO GRADE	EA			3			3
1720	RECONST INLET-MED BOX	EA			1			1
2598	FABRIC-GOETEXTILE TYPE III	SY	6850	3825				10675
2235	BACKFILL UNDERCUT	CY	1140	775				1915
2677	ASPH PAVE MILL & TEXT	TON	185	25	50			260
1	DGA BASE	TON		100				100
216	CL 3 ASPH BASE 1.0D PG76-22	TON	1550	1230	2440			5220

MATERIAL SUMMARY

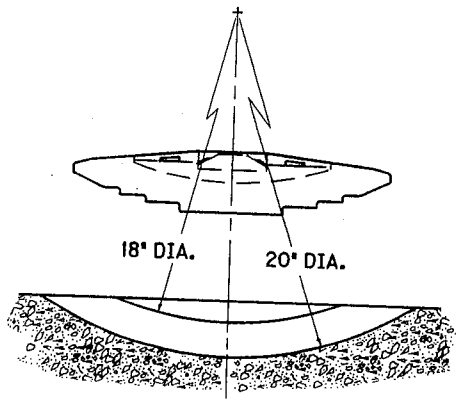
CODE	DESCRIPTION	UNIT	BARREN	METCALFE	RUSSELL	PULASKI	BARREN	TOTAL
332	CL 3 ASPH SURF 0.5A PG76-22	TON	380	155	695			1230
2650	MAINTAIN & CONTROL TRAFFIC	LS	1					1
2650	MAINTAIN & CONTROL TRAFFIC	LS		1				1
2650	MAINTAIN & CONTROL TRAFFIC	LS			1			1
2650	MAINTAIN & CONTROL TRAFFIC	LS				1		1
2650	MAINTAIN & CONTROL TRAFFIC	LS					1	1
2676	MOB FOR ASPH MILL & TEXT	LS	1					1
2676	MOB FOR ASPH MILL & TEXT	LS		1				1
2676	MOB FOR ASPH MILL & TEXT	LS			1			1
	SIGNING							
6440	GMSS GALV STEEL TY B	LB		560	560	1825		2945
6490	CLASS A CONC FOR SIGNS	CY		1.86	1.86	1.86		5.58
6405	SBM ALUM PANEL SIGNS	SF		361	525	183		1069
6406	SBM ALUM SHEET SIGNS .08"	SF					68	68
6227	REM SIGN BRIDGE ATTACH BRACK	EA		6	6			12
6451	REM SIGN SUPPORT BEAMS	EA	21	32	32	12		97
6448	SIGN BRIDGE ATTACH BRACK	EA		2	2			4
2569	DEMOB	LS						1



PLAN VIEW



FRONT ELEVATION



RIGHT SIDE ELEVATION

KENTUCKY
DEPARTMENT OF HIGHWAYS

PAVEMENT
MARKER TYPE V

SPECIAL NOTES APPLICABLE TO PROJECT

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT AND MAY BE OBTAINED BY CONTACTING THE DEPARTMENT OF HIGHWAYS, DIVISION OF DESIGN, AT A COST OF $0.50 PER COPY:

Lane Closure Multi-Lane Highway Case I (TTC-115)
Shoulder Closure (TTC-135)
Miscellaneous Traffic Control Devices (TTD-100)
Miscellaneous Traffic Control Devices (TTD-105)
Post Splicing Detail (TTD-110)
Arrow Panel (TTD-115)
Typical Guardrail Installations (RBI-001-09)
Typical Guardrail Installations (RBI-002-06)
Typical Installation for Guardrail End Treatment Type 2A (RBI-003-06)
Installation for Guardrail End Treatment Type 1 (RBI-004-02)
Steel Beam Guardrail (W-Beam) (RBR-001-11)
Guardrail Components (RBR-005-10)
Guardrail Terminal Sections (RBR-010-05)
Guardrail Posts (RBR-015-04)
Guardrail Posts (RBR-016-04)
Guardrail End Treatment Type 1 (RBR-020-02)
Guardrail End Treatment Type 2A (RBR-025-03)
Silt Check Type I - Straw Bales (RDX-200-02)
Silt Check Type II & III - Crushed Stone (RDX-205)
Temporary Silt Fence (RDX-210-02)
Crash Cushion Type VI (One & Two Direction) (RBE-060-12)
Crash Cushion Type IX (RBE-200-03)
Crash Cushion Type IX Installation at Median Piers (Depressed Median) (RBI-007-08)
Perforated Pipe Types and Cover Heights (RDP-001-05)
Perforated Pipe for Subgrade Drainage on Two-Lane (Class 2) and Multi-Lane Roads (RDP-005-04)
Perforated Pipe Underdrains (Longitudinal and Transverse) (RDP-006-03)
Perforated Pipe Details (Solid Rock) (RDP-007-03)
Perforated Pipe Headwalls (RDP-010-07)
Superelevation for Multi-Lane Pavements (RGS-002-04)
Pavement Marker Arrangements Multi-Lane Roadways (TPM-100)
Pavement Marker Arrangements Multi-Lane Roadways (TPM-105)
Pavement Marker Arrangements Multi-Lane Roadways (TPM-110)
Pavement Marker Arrangements Two-Lane Two-Way Roadway (TPM-115)
Pavement Marker Arrangement Two-Lane to Four-Lane Transitions (TPM-120)
Pavement Marker Arrangement Exit Gore and Off-Ramp (TPM-125)
Pavement Marker Arrangements for On-Ramp with Tapered Acceleration Lane (TPM-130)
Pavement Marker Arrangement for On-Ramp with Parallel Acceleration Lane (TPM-135)
Pavement Marker Arrangements 2-Way Left Turn Lane (TPM-140)
Pavement Marker Arrangement Channelized Intersections (TPM-145)
Mobile Operation for Paint Striping Case III (TTS-110)
Mobile Operation for Paint Striping Case IV (TTS-115)
Concrete Median Barrier End (RBE-065-05)

2000 SPECIFICATIONS

Any reference in the plans or proposal to the ***Standard Specifications for Road and Bridge Construction, Edition of 1998***, and ***Standard Drawings, Edition of 2000*** are superseded by ***Standard Specifications for Road and Bridge Construction, Edition of 2000*** and ***Standard Drawings, Edition of 2003.***

2001 SUPPLEMENTAL SPECIFICATIONS

The ***2001 Supplemental Specifications*** to the 2000 Standard Specifications for Road and Bridge Construction shall apply to this project.

PROPOSAL ADDENDA

All Addenda to this proposal must be incorporated into the proposal when the bid is submitted to the Kentucky Department of Highways. Failure to use the correct and most recent bid sheet(s) may result in the bid being rejected.

SPECIAL NOTES APPLICABLE TO PROJECT (Continued)

BID SUBMITTAL
Bidder must use the Department's Highway Bid Program available on the internet web site of the Department of Highways, Division of Contract Procurement. (www.kytc.state.ky.us/contract)

The Bidder must download the bid items created from the web site to prepare a bid proposal for submission to the Department. The bidder must insert the completed bid item sheets printed from the Program into the bidder's proposal and submit with the disk created by said program.

JOINT VENTURE BIDDING
Joint Venture bidding is permissible. However, both companies MUST purchase a bidding proposal. Either proposal may be submitted but must contain the company names and signatures of both parties where required. A joint bid bond of 5% may be submitted for both companies or each company may submit a separate bond of 5%.

UNDERGROUND FACILITY DAMAGE PROTECTION
The contractor is advised that the Underground Facility Damage Protection Act of 1994, became law January 1, 1995. It is the contractor's responsibility to determine the impact of the act regarding this project, and take all steps necessary to be in compliance with the provisions of the act.

ASPHALT BASE PRICE
The Asphalt Base Price shall be **$185.00 (english)** as applicable in **Section 109.07** of the ***2000 Standard Specifications.***

INCIDENTAL SURFACING
The quantities established in the proposal include estimated quantities required for resurfacing or surfacing mailbox turnouts, farm field entrances, residential and commercial entrances, and road and street approaches. These items are to be paved to the limits as shown on **Standard Drawing RPM 110** or to the limits as directed by the Engineer. In the event signal detectors are present in the intersecting streets or roads, the paving of the crossroads shall be to the right of way limit or back of the signal detector, whichever is the farthest back of the mainline. These areas are to be surfaced or resurfaced as directed by the Engineer and no direct payment will be allowed for placing and compacting.

NHS PROJECTS
This project is on the ***NATIONAL HIGHWAY SYSTEM.***

WORK ZONE CATEGORY I AND II DEVICES
The Contractor is required to provide certification that all *Work Zone Category I and II Devices* are compliant with **NCHRP 350** before these devices are used on the project. *Category II Devices* include, but are not limited to: portable sign stands (with signs), type I, II & III barricades, vertical panels, intrusion alarms, cones with lights, and other work zone devices under 45kg (100 lb).

OPTION B
The Contractor is advised that the compaction of asphalt mixtures furnished to this project will be accepted by **OPTION B** in accordance with **Section 402** and **Section 403** of the ***2000 Standard Specification.***

DGA Base quantities based on 115 pounds per square yard per inch of depth.

Class 3 Asphalt Base 1.0D PG 76-22 estimate based on 110 lbs/s.y. per inch of depth.

Class 3 Asphalt Surface 0.5A PG 76-22 estimate based on 110 lbs/s.y. per inch of depth.

SPECIAL NOTES APPLICABLE TO PROJECT (Continued)

In order for the Cabinet to the use of its resources more efficiently, the contractor shall, prior to issuance of notice to begin work, submit an anticipated earnings schedule broken down by **month** for the expected life of the contract for any project with a bid over **$5,000,000.** The contractor will be provided a spreadsheet to expedite the preparation of this schedule upon award of the contract. No direct payment will be allowed for the preparation and submittal of this schedule.

In the event the Engineer determines that there are inadequate or insufficient road funds available under the contract for the payment of Engineer's estimates for work on the project as they come due, the Engineer may suspend payment for all or a part of the contract. If payment is suspended, the contractor may have the option, with the written agreement of the Engineer, of continuing performance under the contract. If the contractor suspends performance, he shall not resume performance until he receives a back to work notice from the Engineer. In the event that the Engineer suspends payment for all or part of the project as provided herein, the contractor waives any and all right to bring any claim for damages as a result of the suspension or delayed payment.

In the event the Engineer determines that there are inadequate or insufficient road funds available for the payment of Engineer's estimates for work on the project as they come due, the Engineer may at his discretion, by written notice 10 days in advance, terminate all or part of the contract. The Cabinet will remain obligated to pay, as soon as funds are available, all actual items of work performed prior to the contractor's receipt of the notice termination. The contractor shall be entitled to reasonable close out costs attendant to termination of the contract under this provision, but in no event shall the contractor be entitled to more than 10% of the total contract price.

The contractor agrees to all terms and conditions stated above in the event there are inadequate or insufficient funds available under the contract for payment, and contractor further expressly waives any right to assert a claim or bring any form of action against the Cabinet under the contact or pursuant to Kentucky law or regulation, including but not limited to KRS Chapter 45A or KRS Chapter 13B.

To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Transportation Cabinet from and against claims, damages, losses, and expenses, including but not limited to attorney's fees, arising out of or resulting from suspension or termination under this section. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person under the contract.

In the event of any inconsistent provisions within this contract with respect to this section and any other section, the provisions of this section shall govern and control.

Supplemental Specifications to The Standard Specifications for Road and Bridge Construction, 2000 Edition (Effective with the April 25, 2003 Letting)

SUBSECTION:	102.07.01 General.
REVISION:	Replace the first sentence with the following: Submit the Bid Proposal on the forms furnished by the Department including the Highway Bid Program bid item sheets and disk created from the Department's internet web site.
SUBSECTION:	102.07.02 Computer Bidding.
REVISION:	Replace the subsection with the following: Subsequent to ordering a Bid Proposal for a specific project, use the Department's Highway Bid Program on the internet web site of the Department of Highways, Division of Contract Procurement. Download the bid item quantities from the Department's web site to prepare a Bid Proposal for submission to the Department. Insert the completed bid item sheets printed from the Highway Bid Program into the Proposal and submit along with the disk created by said program. In case of a dispute, the Bid Proposal and bid item sheets created by the Highway Bid Program take precedence over any bid submittal. Furthermore the Department takes no responsibility for loss, damage of disks or the compatibility with the bidder's computer equipment or software.
SUBSECTION:	102.08 IRREGULAR BID PROPOSALS.
REVISION:	Add the following to the first set of items: 4) Fails to submit a disk created from the Highway Bid Program
SUBSECTION:	102.08 IRREGULAR BID PROPOSALS.
REVISION:	Replace 1) of the second set of items with the following: 1) when the Bid Proposal is on a form other than that furnished by the Department or printed from other than the Highway Bid Program , or when the form is altered or any part is detached.
SUBSECTION:	103.05 REQUIREMENT OF CONTRACT BOND.
REVISION:	Replace the first sentence of the first paragraph with the following: To be acceptable to the Department, the surety must have a minimum A. M. Best rating of an "A-", be listed on the U.S. Treasury Listing of approved sureties for an amount equal to or greater than the amount of the bond and be an admitted carrier in the Commonwealth of Kentucky. Replace the last sentence of the first paragraph with the following: If at any time during the performance of the Contract the surety company falls below the minimum acceptable requirements, the Contractor shall file a new bond in an amount established by the Commissioner, or his designee, within 14 calendar days of such failure to meet the minimum requirements. Add the following to the end of the subsection: The Department reserves the right to copy the surety on all of its communications with the Contractor concerning the Contractor's performance, or performance deficiencies, on the project and further reserves the right to communicate directly with the surety to inform them of the Contractor's performance, or performance deficiencies, on the bonded project.
SUBSECTION:	108.02 PRECONSTRUCTION CONFERENCE.
REVISION:	Add the following to the first paragraph: Include a plan for updating the schedule. As a minimum, the schedule must be updated whenever a situation arises or event occurs that significantly affects the progress of the work or when the Engineer directs.
SUBSECTION:	109.04.02 Cost-Plus Work.
PART:	F) Overhead.
REVISION:	Add the following new part: F) Overhead. The Department will pay for overhead cost associated with administering the work, not to exceed 5 percent, when the work is done by a Subcontractor.

SUBSECTION: 112.02.05 Temporary Pavement Markings.
PART: C) Temporary Striping.
NUMBER: 2) Paint.
REVISION: Replace with the following:

2) Paint. Conform to Section 842

SUBSECTION: 112.02.05 Temporary Pavement Markings.
PART: C) Temporary Striping.
NUMBER: 3) Drop on Beads.
REVISION: Replace with the following:

3) Drop on Beads. Conform to Section 839

SUBSECTION: 112.03.01 General Traffic Control.
PART: G) Signs.
REVISION: Replace the first sentence with the following:

Completely cover all lettering and symbols on existing, permanent, and temporary signs which do not properly apply to the current traffic phasing, and maintain the covering until the signs are applicable or are removed.

SUBSECTION: 112.03.01 General Traffic Control.
PART: I) Temporary Traffic Signals.
REVISION: Replace the MUTCD reference "Section 4B" with "Chapter 4D"

SECTION: 201 STAKING.
Delete the section and replace with the following:

201.01 DESCRIPTION. When listed as a bid item, furnish all personnel, equipment, stakes, and hubs necessary to construct the roadway and appurtenant structures to the grade and alignment specified in the Contract. When no bid item is listed, the Department will perform staking.

201.02 MATERIALS AND EQUIPMENT. Reserved.

201.03 CONSTRUCTION

201.03.01 Contractor Staking. Perform all necessary surveying under the general supervision of a Professional Engineer or licensed Land Surveyor.

The Department's Engineer will perform the following:

1) Provide adequate referencing of control points to allow prompt re-establishment of the survey centerline, right of way, ramps, crossroads, and frontage roads during construction.
2) Set permanent or temporary bench marks as required.
3) Take any cross sections to verify the accuracy of the original ground information.
4) Take "check sections" to verify that construction is to grade and alignment as specified in the Contract.

The Contractor will perform the following:

1) Re-establish the centerline and set such additional points as may be necessary for construction of the project. Verify the accuracy of the horizontal and vertical control as established by the Department's Engineer before beginning construction.
2) Establish clearing lines so that the project may be cleared without violating the limits of the right of way.
3) Set slope stakes right and left of the survey centerline at 50-foot to 100-foot intervals to guide the contractor in constructing the cuts and fills. These stakes are generally set to shoulder grade for fills and ditch grade for cuts. The cut or fill information, slope, and distance from centerline should be on the front face of the stake; the station number should be on the back of the stake. This stake should be guarded with a lath that has the station number written on the side facing the centerline.

revision continued

4) Grade Stakes (Bluetops). Fine grade control will be set to aid the Contractor in establishing the typical sub-grade section. When using conventional transit and chain methods this fine grade control will be established by setting hubs(referred to as blue tops) every 50 feet to the sub-grade section. These blue tops are set to the hundredth of a foot in elevation and are located left and right of pavement centerline, usually at the edge of metal. Bluetops will be set for the top of sub-grade and the top of aggregate base and/or drainage blanket material. Refer to Section 204.03.10 and Section 302.03.06 for construction tolerances of sub-grade and aggregate base or drainage blanket.
5) Stake all structures (bridges, culverts, pipe, and other appurtenances) so that they can be built to the proper line and grade as shown on the plans and to perform the function for which they were designed.

201.03.02 Department Staking. The Department's Engineer will set all stakes necessary for the construction of the roadway and appurtenant structures to the proper grade and alignment in accordance with the contract.

201.03.03 Electronic Surveying. The Department encourages the use of new and advanced technology in the construction of its roads and structures. However, the following restrictions apply:

1) Tolerances are unchanged. Refer to Section 204.03.10 and Section 302.03.06.
2) Sub-grade check sections are to be done every 500 feet in tangent sections and every 100 feet in curves using conventional survey methods to establish bluetops and to verify the correct operation of the electronic equipment.
3) The Contractor will submit his electronic data files to the Department's Engineer at the beginning of the project so that the Engineer can reference the data for verification of the field work.

201.04 MEASUREMENT.

201.04.01 Contractor Staking. When listed as a bid item, the Department will measure staking as lump sum. The Department will not measure surveying required to correct any errors or inaccuracies resulting from construction operations for payment.

201.04.02 Department Staking. The Department will not measure quantities for payment. When any stakes are disturbed due to unwarranted negligence of the Contractor, the Department will measure the work required to reset the stakes and deduct the cost from monies due the Contractor.

201.05 PAYMENT. The Department will make payment for the completed and accepted quantities under the following:

Code	Pay Item	Pay Unit
2726	Staking	Lump Sum

The Department will consider payment as full compensation for all work required under this section.

SUBSECTION: 204.03.08 Disposal of Wasted Materials.
REVISION: Add the following to the end of the second paragraph:

The Department will pay for the geotechnical investigation and analysis of the proposed waste area when one is requested by the Engineer. Ensure all work is performed by a pre-qualified geotechnical consultant and according to the Department's Geotechnical Manual.

SUBSECTION: 206.04.01 Embankment-in-Place.
REVISION: Add the following:

The Department may make adjustments to embankment-in-place projects when there is actually unanticipated waste on the project. Waste generated by the project phasing will not be considered for adjustment. The Department will make an adjustment for the actual costs incurred by the Contractor.

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SUBSECTION:	208.03.03 Application of Chemical.
PART:	B) Lime.
NUMBER:	3)
REVISION:	Replace the second sentence with the following: Use only when saturated soil conditions exist and the slurry method would worsen the situation or when weather conditions prohibit the use of slurry.
SUBSECTION:	208.03.06 Curing and Protection.
REVISION:	Replace the first sentence of the fourth paragraph with the following: Do not allow any traffic or equipment on the finished surface until 7 days above 40 °F curing is completed or the roadbed cores achieve a minimum strength requirement of 75 psi.
SUBSECTION:	208.04.02 Lime.
REVISION:	Add the following to the end of the second paragraph: When hydrate or quicklime is furnished for dry application, the Department will measure the actual quantity applied to the roadbed.
SUBSECTION:	212.03.03 Permanent Seeding and Protection.
PART:	A) Seed Mixtures for Permanent Seeding.
REVISION:	Replace with the following: A) Seed Mixture for Permanent Seeding. Use seed Mixture No. I, No. III, or as the Contract specifies. Mixture No. I: 75% Kentucky 31 Fescue (Festuca arundinacea) 10% Red Top (Agrostis alba) 5% White Dutch Clover (Trifolium repens) 10% Rygrass, perennial (Lolium perenne) Mixture No. III: 30% Kentucky 31 Fescue (Festuca arundinacea) 15% Red Top (Agrostis alba) 15% Partridge Pea (Cassia fasciculata) 20% Sericea Lespedeza 10% Sweet Clover – Yellow (Melitotus officinalis) 10% Rygrass, perennial (Lolium perenne)
SUBSECTION:	212.03.03 Permanent Seeding and Protection.
PART:	B) Procedures for Permanent Seeding.
REVISION:	Add the following after the third sentence: Remove all rock and dirt clods over 4 inches in diameter from the surface of the seedbed.
SUBSECTION:	212.03.03 Permanent Seeding and Protection.
PART:	C) Crown Vetch.
REVISION:	Replace the first sentence with the following: Sow crown vetch seed on all areas having a slope 3:1 or steeper and consisting of soil or mixtures of broken rock and soil.
SUBSECTION:	212.03.03 Permanent Seeding and Protection.
PART:	E) Erosion Control Blanket.
REVISION:	Replace the first sentence with the following: Install erosion control blankets in ditches, except those to be paved or rock lined, to a flow depth of 1.5 feet.
SUBSECTION:	213.03.02 Progress Requirements.
REVISION:	Replace the word "may" with "will" in the second sentence of the third paragraph.

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SUBSECTION:	213.03.02 Progress Requirements.
REVISION:	Replace the third sentence of the third paragraph with the following: Additionally, the Department will apply a penalty equal to the liquidated damages when all aspects of the work are not coordinated in an acceptable manner within 5 days after written notification.
SUBSECTION:	214.04 MEASUREMENT.
REVISION:	Replace the second sentence with the following: The Department will not measure fabric when the Contract indicates the fabric is incidental to the work or when the specification for another item requires incidental installation of geotextile fabric.
SUBSECTION:	302.02 MATERIALS.
REVISION:	Add the following: 302.02.03 Mixer. Equip the mixer with a water flow system with a positive cut-off control that will stop the flow of water simultaneously with any stoppage in the flow of aggregate and with valves or other devices that can be easily reset when a change in the rate of flow is desired.
SUBSECTION:	401.02.01 All Asphalt Mixing Plants.
PART:	A)
REVISION:	Replace the first sentence of the second paragraph with the following: Provide a laboratory inspected and qualified according to the Department's Quality Assurance Program for Materials Testing and Acceptance and conforming to the following minimum requirements:
SUBSECTION:	401.02.01 All Asphalt Mixing Plants.
PART:	A)
REVISION:	Replace the fourth paragraph with the following: In addition to the equipment required to perform testing according to the AASHTO standards and Kentucky Methods (KM), equip each laboratory with the following minimum furnishings and equipment, conforming to the applicable specifications, as required for the type of construction specified in the Contract: 1) one workbench, at least 2.5 feet wide by 6 feet long; 2) one desk or table and 2 chairs; 3) a fire extinguisher located near the door; and 4) a first aid kit.
SUBSECTION:	401.02.01 All Asphalt Mixing Plants.
PART:	Between Items "H" and "I"
REVISION:	Insert the following new item: Recordation. Provide an automatic graphic or digital record of the production quantities according to AASHTO M156.
SUBSECTION:	401.02.01 All Asphalt Mixing Plants.
PART:	I) Thermometers.
REVISION:	Delete the third paragraph.
SUBSECTION:	401.02.04 Special Requirements for Continuous Plants.
PART:	B) Weight Calibration of Asphalt Binder and Aggregate Feed.
REVISION:	Add the following new paragraph: When equipped with aggregate weighing devices (belt scales), calibrate each cold feeder, along with the aggregate weighing devices, according to Subsection 401.02.05 A) and B).
SUBSECTION:	402.03.01 Responsibilities.
PART:	B) Setup.
REVISION:	Replace (MSG) with (G_{mm})
SUBSECTION:	402.03.01 Responsibilities.
REVISION:	Add the following: C) Process Control. After the setup period, perform the process control operations of KM 64-426.

SUBSECTION:	402.03.02 Acceptance.
PART:	A) General.
REVISION:	Add the following:
	Document and report all acceptance tests on the Asphalt Mixtures Acceptance Workbook (AMAW). Submit the completed AMAW for each lot to the Department within 5 working days after the completion of the lot.
SUBSECTION:	402.03.02 Acceptance.
PART:	C) Setup.
REVISION:	Add the following after the second sentence:
	For mixtures with a total-project quantity between 500 and 1,000 tons, perform a minimum of one process control test for AC, AV, and VMA, and report the results to the Engineer.
	Add the following after the seventh sentence:
	Ensure the adjusted AC remains above the minimums specified in Subsection 403.03.03 C) 2).
SUBSECTION:	402.03.03 Verification.
REVISION:	Replace the first two sentences with the following:
	For volumetric properties, the Department will perform a minimum of one verification test for AC, AV, and VMA for each lot according to the corresponding procedures as given in Subsection 402.03.02. For specialty mixtures, the Department will perform one AC and one gradation determination per lot according to the corresponding procedures as given in Subsection 402.03.02. However, Department personnel will not perform AC determinations according to KM 64-405.
SUBSECTION:	402.05.02 Asphalt Mixtures and Mixtures with RAP.
PART:	D) Conventional and RAP Mixtures Placed Monolithically as Asphalt Pavement Wedge.
REVISION:	Replace with the following:
	The Department will pay as mainline mixture but use a 1.00 pay value for all properties.
SUBSECTION:	402.05.01 Specialty Mixtures.
REVISION:	Add "asphalt mixtures for temporary applications" to the list of defined specialty mixtures.
SUBSECTION:	403.02.05 Release Agent.
REVISION:	Replace with the following:
	Provide materials conforming to KM 64-422.
SUBSECTION:	403.02.06 Transport Equipment.
REVISION:	Add the following after the first sentence:
	Do not load trucks that are contaminated with an unapproved release agent. When such contamination is identified after loading, reject the load. In either case, remove the truck and respective driver from the project for the duration of the project.
SUBSECTION:	403.02.09 Small Tools and Portable Equipment.
REVISION:	Add the following at the end of the first paragraph:
	Do not use an unapproved release agent on any small tools or equipment incidental to the paving operation.
SUBSECTION:	403.03.01 Seasonal and Weather Limitations.
REVISION:	Replace "November 15" with "November 30" throughout the Subsection.
SUBSECTION:	403.03.02 Preparation of Base.
REVISION:	Replace the first sentence of the eighth paragraph with the following:
	Remove existing Type V markers. Fill the recess and any additional damaged area with compacted asphalt mixture within 24 hours of removal.

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SUBSECTION: 403.03.03 Preparation of Mixture.
PART: A) Mixture Composition.
REVISION: Replace Part A) with the following:

A) Mixture Composition. Provide the appropriate mixture composition for the specified asphalt mixture, or substitute a higher aggregate type. When substituting a mixture of a higher ESAL class, provide a mixture of no more than one ESAL class higher than the specified asphalt mixture. Conform to the gradation requirements (control points) of AASHTO MP2 for the Superpave mixture. Unless the Engineer authorizes otherwise in writing, use the same type and source of ingredient aggregates and asphalt binder throughout the entire project for each type of mixture. For asphalt surface courses containing 100 percent polish-resistant coarse aggregate, limit the portion of non-polish-resistant fine aggregate retained on a No. 4 sieve to 5 percent of the total combined aggregates.

When using a porous aggregate, increase the asphalt binder content (AC) as needed for asphalt binder absorption by the aggregate.

The following aggregate requirements are listed in order of the highest, Type A, to the lowest, Type D:

1) Type A. Provide 100 percent of the coarse aggregate Class A sources. Ensure that 20 percent of the total combined aggregate is Class A polish-resistant fine aggregate.
2) Type B. Select either of the 2 following options:

   a) Provide 100 percent of the coarse aggregate from Class B sources.
   b) Provide a combined aggregate, retained on the No. 4 sieve, that is a minimum of 50 percent from any Class A polish-resistant aggregate source except those identified as "Not Permitted as the polish-resistant portion of Class B blends." Submit all Class B blends to the Department for review.

   For Option a) or b) above, ensure one of the following:

   - 20 percent or more of the total combined aggregate is Class A polish resistant fine aggregate.
   - 30 percent or more of the total combined aggregate is Class B polish resistant fine aggregate.
   - 30 percent or more of the total combined aggregate is a combination of Class A and Class B polish resistant fine aggregate.

3) Type C. Ensure that 40 percent or more of the total combined aggregate is polish-resistant; Class A coarse, fine, or combination.
4) Type D. No restriction on aggregate type.

SUBSECTION: 403.03.03 Preparation of Mixture.
PART: B) Moisture Content of Mix
REVISION: Replace the third sentence with the following:

When moisture contents are 0.10 percent or greater, adjust the AC determination made on plant-produced mixture to reflect the actual AC as KM 64-434 directs.

SUBSECTION: 403.03.03 Preparation of Mixture.
PART: C) Mix Design Criteria.
REVISION: Replace the first sentence with the following:

Conform to the gradation requirements (control points) of AASHTO MP2 for the Superpave mixture type the Contract specifies.

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SUBSECTION: 403.03.03 Preparation of Mixture.
PART: C) Mix Design Criteria.
NUMBER: 1)
REVISION: Replace the first sentence with the following:

Submit a preliminary mix design, completed using a Superpave gyratory compactor (SGC) conforming to AASHTO PP 35.

Add the following after the second sentence:

The Department will require a dust-to-binder range of 0.8 to 1.6.

SUBSECTION: 403.03.03 Preparation of Mixture.
PART: C) Mix Design Criteria.
NUMBER: 2) Selection of Optimum AC.
REVISION: Add the following:

Ensure the optimum AC is a minimum of 5.0 percent by weight of the total mixture for all 0.5-inch nominal surface mixtures and 5.3 percent by weight of the total mixture for all 0.38-inch nominal surface mixtures.

SUBSECTION: 403.03.06 Thickness Tolerance.
TABLE: Nominal Maximum Size of Mixture vs. Thickness Range
REVISION: Delete

SUBSECTION: 403.03.08 Rumble Strips.
REVISION: Replace with the following:

A) Interstates and Parkways. Construct sawed rumble strips on all mainline and ramp shoulders to the dimensions shown below.

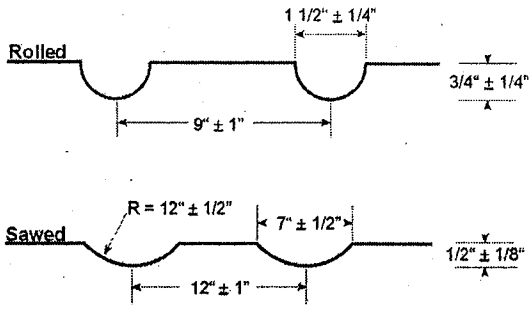
B) Other Roads. When using a surface mixture instead of Asphalt Mixture for Pavement Wedge, or when the Engineer deems it appropriate to pave the driving lanes and the adjacent shoulder monolithically, provide rolled rumble strips. Construct strips on all main line shoulders to the dimensions shown below. When furnishing Asphalt Mixture for Pavement Wedge, binder, or a base mixture for shoulders, the Department will not require rumble strips.

Time the rolling operation so indentations are at the specified size and depth without causing unacceptable displacement of the asphalt mat. Correct unacceptable rolled-in rumble strips by sawing.

On shoulders less than 3 feet, shorten the length and distance of the strips as the Engineer directs.

If preferred, construct the rumble strips by sawing as specified for Interstates and Parkways.

RUMBLE STRIP DIMENSIONS



Distance from the edge of the mainline pavement to the end of the strip: 1 foot
Length of strips: Rolled 2 feet, Sawed 16 inches

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SUBSECTION:	403.03.09 Leveling and Wedging, and Scratch Course.
PART:	A) Leveling and Wedging.
REVISION:	Replace the first sentence with the following:
	Conform to the gradation requirements (control points) for base, binder, or surface as applicable.
SUBSECTION:	403.03.09 Leveling and Wedging, and Scratch Course.
PART:	B) Scratch Course.
REVISION:	Replace the second sentence with the following:
	Conform to the gradation requirements (control points) for base, binder, or surface as the Engineer directs.
SUBSECTION:	403.04.03 Asphalt Mixtures.
REVISION:	Add the following:
	The Department will not measure rumble strips for payment and will consider them incidental to this bid item.
SECTION:	404 OPEN-GRADED FRICTION COURSE
TABLE:	LOT PAY ADJUSTMENT SCHEDULE FOR SPECIALTY MIXTURES
REVISION:	Replace the table with the following table:

LOT PAY ADJUSTMENT SCHEDULE FOR SPECIALTY MIXTURES (TEST DEVIATION FROM JMF)

	Pay Value	Deviation From JMF (%)
Asphalt Binder Content	1.00	0.0-0.5
	0.98	0.6
	0.95	---
	0.90	0.7
	0.85	0.8
	0.75	≥ 0.9
1 1/2 inch Sieve	1.00	0-13
	0.98	14
	0.95	15-16
	0.90	17-20
	0.85	21-23
	0.75	≥ 24
1 inch, 3/4 inch, and 1/2 inch Sieves	1.00	0-9
	0.98	10
	0.95	11-12
	0.90	13-14
	0.85	15-16
	0.75	≥ 17
3/8 inch, No. 4, No. 8, No. 16, and No. 30 Sieves	1.00	0-8
	0.98	9
	0.95	10
	0.90	11-12
	0.85	13-14
	0.75	≥ 15
No. 50 Sieve	1.00	0-6
	0.98	7
	0.95	8
	0.90	9
	0.85	10
	0.75	≥ 11
No. 100 Sieve	1.00	0-3
	0.98	---
	0.95	4
	0.90	5
	0.85	---
	0.75	≥ 6
No. 200 Sieve	1.00	0.0-2.0
	0.98	2.5
	0.95	3.0
	0.90	---
	0.85	3.5
	0.75	≥ 4.0
Fineness Modulus	1.00	0.0-0.30
	0.98	0.31-0.34
	0.95	0.35-0.39
	0.90	0.40-0.46
	0.85	0.47-0.55
	0.75	≥ 0.56

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SUBSECTION: 406.02.01 Tack Coat.
REVISION: Replace with the following:

Furnish any of the following asphalt materials conforming to 806: SS-1, SS-1h, or RS-1.

SUBSECTION: 406.02.03 Curing Seal.
REVISION: Replace with the following:

Furnish any of the following asphalt materials conforming to 806: RS-1, RS-2, SS-1, SS-1h, or Primer L.

SUBSECTION: 406.03.03 Application.
REVISION: Replace the temperature table with the following:

Primer L	60-120 °F
SS-1, SS-1h	70-160 °F
RS-1, RS-2	70-140 °F

SUBSECTION: 406.03.03 Application.
PART: B) Asphalt Tack Coat.
REVISION: Replace the second paragraph with the following:

When furnishing RS-1 for tack, apply it undiluted.

Replace the first sentence of the third paragraph with the following:

When furnishing SS-1 or SS-1h for tack, the Department will allow diluted or undiluted application provided uniform and complete coverage is achieved.

SUBSECTION: 407.02.02 Aggregate.
REVISION: Change Sieve Size No. 30 to read Sieve Size No. 50.

SUBSECTION: 408.04.02 Mobilization for Asphalt Pavement Milling and Texturing.
REVISION: Add the following:

For group contracts, the Department will measure the quantity for each project (subsection) that has a bid item for Mobilization for Asphalt Pavement Milling and Texturing.

SUBSECTION: 409.02 MATERIALS AND EQUIPMENT.
REVISION: Replace "KM 64-427" with the following:

the guidelines in Subsection 409.03.02

SUBSECTION: 409.03.01 Restrictions.
REVISION: Add the following sentence:

When the mixture's bid item specifies PG 76-22, limit RAP content to 20 percent or less.

SUBSECTION: 409.03.02 Preparation of Mixture.
PART: A) Mix Requirements.
REVISION: Void the Revision and replace with the following:

Conform to the Contract requirements for each mixture produced using RAP. If mixtures produced using RAP do not conform to the requirements for that mixture, complete the project using all virgin materials at no additional expense to the Department. Conform to the following table to select the appropriate grade of virgin asphalt binder to blend with the RAP:

Mixture's Bid Item	Appropriate Virgin Asphalt Binder		
	0-20% RAP	21-30% RAP	>30% RAP
PG 76-22	PG 76-22	-	-
PG 70-22	PG 70-22	PG 64-22	*
PG 64-22	PG 64-22	PG 64-22	*

* Select according to KM 64-427

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SUBSECTION: 410.05 PAYMENT.
REVISION: Replace the RIDE QUALITY ADJUSTMENT SCHEDULE with the following 2 schedules:

RIDE QUALITY ADJUSTMENT SCHEDULE FOR ROADS POSTED GREATER THAN 45 MPH

IRI	Pay Value[1]
36 or Less	+0.15
37 to 46	= 0.015 x (47 – IRI)
47 to 66	0.00
67 to 76	= 0.015 x (67 – IRI)
77 or higher	Corrective work or replacement required

RIDE QUALITY ADJUSTMENT SCHEDULE FOR ROADS POSTED 45 MPH OR LESS

Rideability Index	Pay Value[1]
36 or Less	+0.15
37 to 46	= 0.015 x (47 – IRI)
47 to 85	0.00
86 or lower	Corrective work or replacement required

[1] *The Department will not apply a positive pay value for corrective work other than removal and replacement to achieve the IRI*

SUBSECTION: 501.03.13 Finishing.
PART: H) Texturing.
REVISION: Replace the third paragraph with the following:

Form transverse grooves in the concrete with a width between 0.09 inch and 0.13 inch and a depth between 0.12 inch and 0.19 inch. Space the grooves at random intervals between 0.4 inch to 1.5 inches with no more than 50 percent of the spacing being one inch or greater.

SUBSECTION: 502.03 CONSTRUCTION.
PART: D) Strength Testing and Opening to Traffic.
NUMBER: 1) Cylinders.
REVISION: Replace the first sentence with the following:

The Department will cast, cure, and test 3 sets from each 150 cubic yards of concrete.

SUBSECTION: 503.03.09 Ride Quality.
REVISION: Replace item 4) with the following:

Achieve an IRI of 63 or less for each traffic lane with no individual one-mile section having an IRI of greater than 76.

SUBSECTION: 506.03.01 Header Curb, Valley Gutter, and Curb and Gutter (Combination).
REVISION: In the second sentence of the third paragraph replace the Subsection reference 601.03.12 with 501.02.10.
In the second sentence of the sixth paragraph replace the Subsection reference 601.03.16 with 501.03.17 D).

SUBSECTION: 508.03.03 Precast Construction.
REVISION: Replace "Subsection 605.03" in the first sentence with Section 605.

SUBSECTION: 509.03 CONSTRUCTION.
REVISION: Replace "Subsection 605.03" in the first sentence with Section 605.

SUBSECTION: 601.02.13 Forms.
PART: F) Stay-In-Place Metal Forms.
NUMBER: 1) Forms and Supports.
REVISION: Replace ASTM A 446 with ASTM A 653.
Replace ASTM A 525 with ASTM A 924.

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SUBSECTION: 601.03.03 Proportioning and Requirements.
PART: A) Concrete.
TABLE: INGREDIENT PROPORTIONS AND REQUIREMENTS FOR VARIOUS CLASSES OF CONCRETE
REVISION: Add the following foot note to AA Slump:

The Department may allow the slump of AA concrete to be increased up to a 6 inch maximum, provided the w/c ratio does not exceed 0.40 and a high range water reducer (Type F or G) is used. Trial Batches will be required if producer has not previously supplied.

SUBSECTION: 601.03.03 Proportioning and Requirements.
PART: A) Concrete.
TABLE: INGREDIENT PROPORTIONS AND REQUIREMENTS FOR VARIOUS CLASSES OF CONCRETE
REVISION: Replace note 11 with the following:

Compressive Strength Testing, Opening to Traffic and Acceptance Requirements for Class M1 and Class M2. Test one set of cylinders at 24 ± 0.5 hours from the time of molding, and allow the resulting average strength to dictate one of the following actions:

(a) *If the average compressive strength is 3,500 psi or above, open to traffic, and test the remaining set of cylinders at an age of 7 days or 28 days.*
(b) *If the average compressive strength is between 3,000 and 3,500 psi, open to traffic, and test the remaining set of cylinders at 48 ± one hour.*
(c) *If the average compressive strength is less than 3,000 psi, protect the item as directed or approved. Test the remaining set of cylinders at 48 ± one hour.*

If the average strength of the cylinders tested at 48 ± one hour is 3,500 psi or above, the Engineer will consider the concrete acceptable. If the average strength is below 3,500 psi, take 2 cores from the concrete and test at an age of 7 days. If the average strength of the cores tested at 7 days is 4,000 psi, the Engineer will consider the concrete acceptable.

When 2 consecutive first sets of cylinders or when 2 first sets out of any 4 first sets of cylinders do not reach 3,500 psi, compressive strength, the Engineer will suspend the work. Resume work when the Engineer approves the adjusted mix design.

Cast 2 sets of cylinders from the concrete used for each placement.

Cast the cylinders after tests verify that the concrete conforms to slump and air content requirements. Make and cure the cylinders according to the procedures outlined in KM 64-305. Department personnel will test the mixture and cast cylinders.

SUBSECTION: 601.03.03 Proportioning and Requirements.
PART: C) Mixtures Using Type IP, IS and I(SM) Cement or Mineral Admixtures.
NUMBER: 2) Mineral Admixtures.
REVISION: Add the following after the first sentence:

Reduction of the total cement content by a combination of any mineral admixtures will be allowed, up to a maximum of 30 percent.

SUBSECTION: 601.03.03 Proportioning and Requirements.
PART: C) Mixtures Using Type IP Cement or Mineral Admixtures.
NUMBER: 2) Mineral Admixtures.
LETTER: b) Ground Granulated Blast Furnace Slag (GGBF Slag).
REVISION: Replace the first sentence with the following:

When added as a separate ingredient, use Grade 120 GGBF or 100 GGBF slag to reduce the quantity of cement, except do not use GGBF slag to reduce the quantity of Type IS or I(SM) cement.

SUBSECTION: 601.03.04 Classes and Primary Uses.
PART: P) Non-Shrink Grout.
REVISION: Replace with the following:

Bonding and sealing for post-tensioning, tie-back rods and bolts, and box beams.

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SUBSECTION:	601.03.09 Placing Concrete.
PART:	A) General.
REVISION:	Add the following to the fifth paragraph:
	When pumping, equip the delivery pipe with a nozzle, having a minimum of 2 right angles, at the discharge end.
SUBSECTION:	601.03.09 Placing Concrete.
PART:	D) Weather Limitations.
REVISION:	Replace the first sentence of the second paragraph with the following:
	Maintain the temperature of the mixture at or below 90 °F during placement. Unless the Engineer determines that safety concerns or other considerations prohibit a shutdown, cease concrete production when the mixture exceeds 90 °F until adequate methods are in place to reduce or maintain the mixture temperature.
SUBSECTION:	601.03.15 Opening to Traffic.
TABLE:	Required Time in Calendar Days Before Applying Significant Loads on Concrete Structures
REVISION:	Change the title of the seventh item to the following:
	Caps on Concrete Pile Bents, Open Column Abutments, and Piers
SUBSECTION:	606.02 MATERIALS AND EQUIPMENT.
REVISION:	Add the following subsection:
	606.02.11 Coarse Aggregate. Conform to Section 805, size 9-M.
SUBSECTION:	607.03.05 Bolted Connections Using High-Strength Steel Bolts.
PART:	B) Direct Tension Indicators.
REVISION:	Replace the first two sentences of the third paragraph with the following:
	Under normal conditions, install the tension indicator under the non-turned element of the fastening system. Obtain the Engineer's permission before installing tension indicators under the turned element. If the Engineer determines that it is necessary to install the tension indicator under the turned element, install additional hardened washers according to the manufacturer's instructions.
	Add the following to the end of the fourth paragraph:
	The fastener assembly may also need to be replaced.
SUBSECTION:	607.03.08 Planing and Finishing.
PART:	B) Flame Cutting.
REVISION:	Replace the first sentence of the second paragraph with the following:
	Remove roughness exceeding these values and occasional notches or gouges no more than 3/16 inch deep, on otherwise satisfactory surfaces, by machining or grinding.

SUBSECTION:	607.03.23 Cleaning and Painting.
PART:	D) Preparation for Field Coatings.
REVISION:	Replace the second and third paragraphs with the following:
	After erection, including all bolting and remedial work, prepare the shop applied zinc coating for field applied intermediate coating as follows. Remove all grease, oil or other lubricants from all surfaces to be painted including lubricant or residuals from the surfaces of all galvanized nuts, bolts and washers by solvent cleaning according to SSPC SP 1. When dry overspray from the shop applied zinc coating exists, remove by sanding. High pressure water wash all structural steel at 4,500 to 5,000 psi. using clean potable water. As needed, use a non-sudsing, bio-degrable detergent to remove all surface contaminants not removed by high pressure water washing. Rinse all areas where a detergent and/or solvent was applied by pressure washing with clean potable water. Blast clean all surfaces sustaining damage to the shop applied zinc coating to the pictorial standards described in subsection B. Apply a field coat of approved zinc rich coating to all areas not possessing an acceptable shop applied zinc coating. Completely remove all rust, scale and other foreign material before applying the intermediate coating. When application of the finish coat exceeds the recoat window of the intermediate coat, abrade the surface of the intermediate coat according to the coating manufacturer's recommendations before applying the finish coat.
SUBSECTION:	607.03.23 Cleaning and Painting.
PART:	E) Application of Field Coatings.
REVISION:	Replace the second paragraph with the following:
	Apply paint only to clean and dry surfaces when the ambient air temperature is 40 °F or greater, the surface temperature of the steel members to be painted is at least 5 °F above the dew point, and the relative humidity is less than 90 percent. Do not apply paint to damp or frosted surfaces, nor during any period of rainfall. Replace the fifth paragraph with the following: Paint from the top of the structure toward the bottom, and proceed by sections, bays, or parts of the work, unless the Contract or Engineer directs otherwise.
SUBSECTION:	611.02.01 Concrete.
REVISION:	Replace the first sentence with the following: Conform to ASTM C 1433.
SUBSECTION:	611.03.01 Transportation and Handling.
REVISION:	Replace the first sentence with the following: Handle and store the precast units so that flexural stresses are not induced until the concrete age is 7 days or attains a compressive strength of 3,000 psi.
SUBSECTION:	611.03.02 Precast Unit Construction.
REVISION:	Add the following: 4) Contrary to ASTM C 1433 Section 10.3, assure the compressive strength of the cores tested are equal to or greater than the design strength.
SUBSECTION:	611.03.07 Joints.
PART:	A) Rubber Gaskets.
REVISION:	Replace the title with the following: A) Butyl Rubber Sealant.
SUBSECTION:	611.03.07 Joints.
PART:	B) Flexible Plastic Gaskets.
REVISION:	Replace the title with the following: B) Rubber Gaskets.

SUBSECTION:	613.05 PAYMENT.
REVISION:	Replace 8160 Structure Excavation with the following:
	2203 Structure Excavation Unclassified
SUBSECTION:	614.02.01 Paint.
REVISION:	Add the following:
	Furnish a paint system in which all coats are produced by the same manufacturer and use the same system throughout the entire project.
SUBSECTION:	614.03.06 Paint Application.
REVISION:	Replace the first sentence of the fourth paragraph with the following:
	Paint from the top of the structure toward the bottom, and proceed by sections, bays, or parts of the work, unless the Contract or Engineer directs otherwise.
SUBSECTION:	701.02.03 Joint Materials.
PART:	D) Flexible Plastic Gaskets.
REVISION:	Replace with the following:
	D) Butyl Rubber Sealants. Conform to Section 807.
SUBSECTION:	701.02.04 Bedding Materials.
REVISION:	Replace the first sentence with the following:
	Use No. 8 aggregate, No. 9 aggregate, or a fine aggregate conforming to Subsection 804.08 for bedding material.
SUBSECTION:	701.02.04 Bedding Materials.
TABLE:	A1, A2, and A3 Characteristics
REVISION:	Under A3, replace "51 max" with "51 min"
SUBSECTION:	702.03.05 Joints.
PART:	A) Reinforced Concrete Pipe.
NUMBER:	2) Rubber Gaskets.
REVISION:	Replace with the following:
	In addition to the requirements of Subsection 701.02, use a pipe section conforming to AASHTO M 315. Use the gasket manufacturer's recommended cement and lubricant. Snugly fit the rubber gasket in the beveled surface of the tongue and groove ends of the sections to form a flexible seal under all conditions of service.
SUBSECTION:	701.03.05 Joints.
PART:	B) Corrugated Metal Pipe.
REVISION:	Void the Revision and replace with the following:
	Construct joints using a band with annular corrugations and a bolt, bar and strap connection. Use a minimum nominal band width of 12 inches for all pipe diameters 54 inches and smaller. Use a two-piece band with a minimum nominal width of 20 inches for all pipe diameters greater than 54 inches. Manufacture the band from the same base materials as the pipe. The pipe bands may be up to two gauges lighter than the pipe it is joining, with a minimum gauge thickness of 16. The Department may allow dimple band connections for field cut pipe. Install the connecting bands according to the manufacturer's written recommendations.
SUBSECTION:	703.02.09 Geotextile Fabric.
REVISION:	Replace Section reference 845 with 843.
SUBSECTION:	703.04.08 Geotextile Fabric.
REVISION:	Add the subsection:
	703.04.08 Geotextile Fabric. The Department will measure the quantity according to Subsection 214.04.
SUBSECTION:	710.02 MATERIALS.
REVISION:	Add the following Subsection:
	710.02.15 High Density Polyethylene (HDPE) Adjusting Rings. Conform to Section 846.

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SUBSECTION:	710.03.01 Newly Constructed Small Drainage Structures.
PART:	A) General.
REVISION:	Replace the last sentence of the sixth paragraph with the following:
	Use precast concrete, precast concrete pipe sections, cast-in-place, brick, or HDPE adjusting rings for adjustment of existing manholes according to the Standard Specifications.
SUBSECTION:	710.03.01 Newly Constructed Small Drainage Structures.
PART:	B) Precast Structures Except Manholes.
REVISION:	Replace the first two sentences with the following:
	Only furnish products manufactured by a precast producer listed in the Department's List of Approved Materials. If the producer does not have an approved drawing for the product, submit 5 copies of shop drawings to the Engineer for review and approval.
SUBSECTION:	710.03.03 Adjusted Small Drainage Structures.
REVISION:	Add the following sentence to the end of the first paragraph:
	For HDPE adjusting rings, install and seal according to the manufacturer's recommendations.
SUBSECTION:	712.03.02 Type V Markers.
REVISION:	Replace the first sentence of the first paragraph with the following:
	Install Type V Markers in slots cut into the pavement according to the manufacturer's recommendations.
	Delete the last paragraph.
SUBSECTION:	713.02.02 Drop on Glass Beads.
REVISION:	Replace with the following:
	Use beads that will ensure the pavement marking material will meet retroreflectivity requirements. The Department will evaluate the beads as part of the marking system through retroreflectivity readings.
SECTION:	713 PERMANENT PAVEMENT STRIPING.
REVISION:	Add the following subsection:
	713.03.06 Acceptance of Non-Specification Markings. If weather conditions allow, perform corrective work to bring striping retroreflectivity into conformance. If corrective work has been performed and the work meets all requirements except for minimum retroreflectivity, the Department may accept the work according to Subsection 105.04. When the Engineer determines that the markings may be left in place, the Department will accept them at a reduction in the Contract unit bid price according to the Acceptance Pay Schedule. Additionally, the Engineer may remove the striping crew for the remainder of the project according to Subsection 108.06 Part A). The Engineer may also apply this section when corrective work cannot be performed due to weather.
	Acceptance Pay Schedule – White 156 to 174 mcd/lux/square meter – 50% pay 138 to 155 mcd/lux/square meter – 25% pay 120 to 137 mcd/lux/square meter – 0% pay < 120 mcd/lux/square meter – unacceptable
	Acceptance Pay Schedule – Yellow 126 to 149 mcd/lux/square meter – 50% pay 103 to 125 mcd/lux/square meter – 25% pay 80 to 102 mcd/lux/square meter – 0% pay < 80 mcd/lux/square meter – unacceptable

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SUBSECTION:	713.03 CONSTRUCTION.
REVISION:	Replace the MUTCD references to "Part III" with "Part 3"
SUBSECTION:	714.02.03 Binder.
REVISION:	Replace the last sentence with the following: Submit the material and method of application to the Engineer and obtain written approval from the Engineer and the manufacturer of the pavement marking material before applying.
SUBSECTION:	714.02.04 Drop on Glass Beads.
REVISION:	Replace with the following: Use beads that will ensure the pavement marking material will meet retroreflectivity requirements. The Department will evaluate the beads as part of the marking system through retroreflectivity readings.
SUBSECTION:	714.03 CONSTRUCTION.
REVISION:	Replace the MUTCD references to "Part III" with "Part 3" and figure references to "3-11 and 3-12" with "3B-8 and 3B-9"
SUBSECTION:	714.03.01 Layout.
REVISION:	Replace the MUTCD reference to "Part III" with "Part 3"
SUBSECTION:	714.03.03 Application.
PART:	A) Type I Tape.
REVISION:	Add the following: When applied to concrete, cut the tape at all joints.
SUBSECTION:	714.03.04 Restrictions.
REVISION:	Replace the first paragraph with the following: Do not apply the pavement marking material when air and pavement temperatures are below 50 °F. Delete the third paragraph.
SUBSECTION:	714.03.06 Proving Period for Durable Markings.
PART:	A) Requirements.
NUMBER:	1) Type I Tape.
REVISION:	Add the following: Type I Tape is manufactured off site and warranted by the manufacturer to meet certain retroreflective requirements. As long as the material is adequately bonded to the surface and shows no sign of failure due to the other items listed in Subsection 714.03.06 A) 1), retroreflectivity readings will not be required. In the absence of readings, the Department will accept tape based on a nighttime visual observation.
SUBSECTION:	714.03.06 Proving Period for Durable Markings.
PART:	A) Requirements.
NUMBER:	2) Thermoplastic.
REVISION:	Replace the first sentence of the second paragraph with the following: The minimum retroreflectivity requirements at the end of the proving period, as measured with a LTL 2000, LTL 2000Y, or Department approved 30M geometry mobile instrument are as follows: Replace the first sentence of the third paragraph with the following: The Department will take these measurements between 150 and 210 days after the start of the proving period, basing acceptance on KM 202 for LTL 2000 readings and KM 203 for mobile readings.
SUBSECTION:	714.05 PAYMENT.
REVISION:	Replace with the following: The Department will make payment upon completion of the work. If after the proving period the markings do not meet minimum retroreflectivity requirements, the Department will adjust the payment or require corrective work according to the following:

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SUBSECTION:	717.02.04 Drop on Glass Beads.
REVISION:	Replace with the following: Use beads that will ensure the pavement marking material will meet retroreflectivity requirements. The Department will evaluate the beads as part of the marking system through retroreflectivity readings.
SECTION:	804.03 Concrete.
REVISION:	Replace the last sentence with the following: The Department will waive the requirements for gradation, sand equivalent, and uncompacted voids for concrete pipe.
SUBSECTION:	804.04.04 Requirements for Combined Aggregates.
PART:	B) Sand Equivalent.
REVISION:	Replace the third paragraph with the following: The Department may waive the sand equivalent requirement provided the portion of the combined aggregate passing the No. 40 sieve is non-plastic according to AASHTO T 90.
SUBSECTION:	804.04.04 Requirements for Combined Aggregates KM.
TABLE:	Superpave Fine Aggregate Consensus Property Requirements.
REVISION:	For ESAL Class 1, Replace both dashes with 40.
SUBSECTION:	805.03.01 Soundness and Shale.
PART:	AGGREGATE USE/Portland Cement Concrete Mixtures.
REVISION:	Replace the title use "Class AA, Class S and Bridge Deck Overlays" with "Aggregate for Bridge Decks, Bridge Deck Overlays, and Bridge Barrier Walls"
SECTION:	805 COARSE AGGREGATES.
TABLE:	Sizes of Coarse Aggregates.
REVISION:	Replace KM 64-420 in footnote (1) with KM 64-620.
SECTION:	805 COARSE AGGREGATES.
TABLE:	Aggregates Size Use.
REVISION:	For Cement Concrete Structures and Incidental Construction add 9-M for Overlays to the sizes to be used column.
SUBSECTION:	805.03.03 Gradation.
REVISION:	Replace the last sentence with the following: The Department will allow blending of same source/same type aggregate to achieve designated sizes when precise procedures are used such as cold feeds, belts, weigh hoppers, or equivalent.
SUBSECTION:	805.03.04 Erodible or Unstable Material.
REVISION:	Add the subsection: 805.03.04 Erodible or Unstable Material. Treat as applicable. The Department considers Size No. 57 or larger aggregate, except crushed or uncrushed gravel, non-erodible. The Department considers the following materials to be erodible or unstable: 1) Friable sandstone. The Engineer determines when sandstone is friable or non-friable. 2) Crushed or uncrushed gravel, any size. 3) Crushed coarse aggregate smaller than Size No. 57. 4) Any material with 50 percent or more passing the No. 4 sieve.
SUBSECTION:	805.04 CONCRETE.
REVISION:	Replace the second paragraph with the following: The Department will waive the requirements for gradation and finer than No. 200 for concrete pipe.
SUBSECTION:	805.10 GRANULAR EMBANKMENT.
REVISION:	Replace "2 ½-inch" with "12-inch".
SUBSECTION:	805.10 GRANULAR EMBANKMENT.
PART:	1)
REVISION:	Replace with the following: 1) Engineer approved shot limestone or sandstone from roadway excavation, borrow excavation, or another approved source.

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SUBSECTION: 805.11 STRUCTURE GRANULAR BACKFILL.
REVISION: Replace with the following:

Provide crushed or uncrushed aggregate meeting the quality requirements of this section. When the material includes a significant amount of individual fragments greater than 1 ½ inches, the Engineer may visually accept the minus No. 200 portion. Conform to the following gradation:

Sieve Size	Percent Passing
4 inch	100
No. 4	0-10
No. 200	0-5

SUBSECTION: 805.13.03 Channel Lining, Class IA.
REVISION: Replace the first sentence with the following:

Provide crushed stone meeting the general requirements of this section.

SUBSECTION: 805.13.04 Channel Lining, Class II.
REVISION: Replace the first sentence with the following:

Provide crushed stone meeting the general requirements of this section.

SUBSECTION: 805.15 GRADATION ACCEPTANCE OF NON-SPECIFICATION COARSE AGGREGATE.
TABLE: GRADATION – COARSE AGGREGATES FOR UNDERDRAINS
REVISION: Replace "No. 200" sieve with "No. 100".

SUBSECTION: 810.03.04 Extra Protection
REVISION: Replace "mm" in the second sentence of the second paragraph with "inches".

SECTION: 810.03 REINFORCED CONCRETE PIPE.
REVISION: Add new subsection:

810.03.07 Concrete. Submit Concrete Mix Design to the Central Office Materials.

SECTION: 812.01.01 Structural Steel, All Types.
REVISION: Replace second sentence with the following:

When the supplementary requirement of this specification are specified, they exceed the requirements of ASTM A 36, A 514, A 572, A 588, and ASTM A 852.

SUBSECTION: 812.01.01 Structural Steel, All Types.
PART: A) Structural Steel.
REVISION: Delete AASHTO M 183.

SUBSECTION: 812.01.01 Structural Steel, All Types.
PART: B) High-Strength Low-Alloy Columbium-Vandium Steels of Structural Quality.
REVISION: Delete AASHTO M 223.

SUBSECTION: 812.01.01 Structural Steel, All Types.
PART: C) High-Strength Low-Alloy Structural Steel with 345 Mpa Minimum Yield Point to 4 Inches Thick.
REVISION: Delete AASHTO M 222.

SUBSECTION: 812.01.01 Structural Steel, All Types.
PART: E) High-Yield-Strength, Quenched and Tempered Alloy Steel Plate, Suitable for Welding.
REVISION: Delete AASHTO M 244.

SECTION: 813.08.05 Aluminum Alloy Rolled or Extruded Shapes.
REVISION: Replace "T-4 AND T6" with "T6".

SUBSECTION: 813.09.02 High-Strength Steel Bolts, Nuts, and Washers.
PART: A) Bolts.
REVISION:

HARDNESS NUMBER				
Bolt Size (in)	Brinell		Rockwell C	
	Min	Max	Min	Max
½ - 1	253	319	25	34

SUBSECTION: 813.13 MATTRESSES AND GABIONS.
REVISION: Replace the first sentence of the first paragraph with the following:

Conform to ASTM A 975, Style 1 or ASTM A 974, Style 1 or 2.

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SUBSECTION: 814.04.01 Steel Guardrail Posts.
REVISION: Replace AASHTO M 183 in the first sentence with ASTM A 36.

SUBSECTION: 814.05.02 Composite Plastic.
REVISION: Add the following sentence to the first paragraph:

Rubber is an acceptable alternate to plastic in their composition.

SUBSECTION: 814.06 MATERIALS FOR END TREATMENTS.
PART: D) Steel Sheet (for rail plates and mounting brackets).
REVISION: Replace 570, Grade D with the 1011, Type SS, Grade 36.

SUBSECTION: 816.02 GENERAL.
REVISION: Replace ASTM D 2521 with ASTM A 239.

SUBSECTION: 816.02.02 Aluminum-Coated Steel.
REVISION: Replace 0.01 with 0.099.

SUBSECTION: 819.01.01 Steel Plates.
REVISION: Replace "Paragraph 14" in the second sentence of the second paragraph with "Table 6".

SUBSECTION: 821.03 SAMPLING AND TESTING.
REVISION: In the third sentence of the first paragraph, replace calendar days with working days.

SUBSECTION: 827.04 PERMANENT SEED.
REVISION: Replace with the following:

Conform to the requirements outlined in the "Kentucky Seed Law and Provisions for Seed Certification in Kentucky" and the "Regulations under the Kentucky Seed Law", with following exceptions:

1. Obtain seed only through registered dealers that are permitted for labeling of seed.
2. Ensure all deliveries/shipments of premixed seed are accompanied with a master blend sheet.
3. The Department may sample the seed at the job site at any time.
4. Ensure all bags and containers have an acceptable seed tag attached.

Do not use seed (grasses, native grasses and legumes) if the weed seed is over 2%, total germination (including hard seed) is less than 60%, if the seed test date is over 9 months old exclusive of the month tested, or if the limits of noxious weed seed is exceeded.

Ensure that noxious weed seeds contained in any seed or seed mixture does not exceed the maximum permitted rate of occurrence per pound.

Name of Kind	Max. No. Seeds (per pound)*
Balloon Vine (Cardiospermum Halicacabum)	0
Purple Moonflower (Ipomoea turbinata)	0
Canada Thistle (Cirsium Arvense)	0
Johnsongrass (Sorghum Halepense and Sorghum Almum and perennial rhizomatous derivatives of these species)	0
Quackgrass (Elytrigia Repens)	0
Annual Bluegrass (Poa Annua)	256
Buckhorn Plantain (Plantago lanceolata)	304
Corncockle (Agrostemma Githago)	192
Dodder (Cuscuta spp.)	192
Giant Foxtail (Setaria Faberii)	192
Oxeye Daisy (Chrysanthemum leucanthemum)	256
Sorrel (Rumex Acetosella)	256
Wild Onion and Wild Garlic (Allium spp.)	96

* Seed or seed mixtures that contain in excess of 480 total noxious seeds per pound is prohibited

Wildflower seed shall not be planted until approved by the MCL.

SUBSECTION: 832.02 TYPE I POSTS.
REVISION: Replace ASTM A 570 with ASTM A 1011.

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SECTION: 840 RAISED PAVEMENT MARKERS
REVISION: Replace the section with the following:

840.01 TYPE IV MARKERS. Provide markers from the Department's List of Approved Materials. Type IV markers are replacement lenses for use in Type V marker castings.

840.02 TYPE V MARKERS. Provide markers from the Department's List of Approved Materials. Type V markers consist of an iron casting with a Type IV marker (mono or bi-directional) attached.

840.03 TYPE IVA MARKERS. Provide markers from the Department's List of Approved Materials. Type IVA markers are surface mounted lenses for temporary use in work zones.

840.04 SAMPLING. Obtain a manufacturer's certification for each shipment. Include with each shipment of adhesive a written statement from the manufacturer certifying that it conforms to the recommendations of the marker manufacturer, and stating the minimum temperature the adhesive can be satisfactorily mixed and applied.

840.05 PACKAGING. Suitably and substantially package all materials with the name and address of the manufacturer and vendor, contract or purchase number, kind of material, trade name, and net contents plainly marked on each package.

SUBSECTION: 843.01.01 Geotextile Fabric.
REVISION: Add the following sentence to the first paragraph:

Use circular-knit geotextile conforming to ASTM D 6707 for perforated pipe socks.

Add the following sentence to the third paragraph:

The manufacturer must participate in the National Transportation Product Evaluation Program (NTEP) for Geotextiles and Geosynthetics.

SUBSECTION: 843.01.01 Geotextile Fabric.
PART: C) Acceptance.
REVISION: Delete the burst strength requirement from each table.

SUBSECTION: 845.02.03 Wrapping.
REVISION: Replace Section 845 with Section 843, Type II.

SECTION: 846 HIGH DENSITY POLYETHYLENE (HDPE) ADJUSTING RINGS
REVISION: Add New Section:

846.01 RESIN. Use a recycled polyethylene plastic or virgin resin producing a molded part meeting the following requirements:

Melt Flow Index (ASTM D 1238)	4.0-10.0 g/10min
Density (ASTM D 792)	0.941-0.965 g/cm^3
Tensile (ASTM D 638)	2000-5000 lb/in^2
ESCR (ASTM D 1693)	Condition C

846.02 LOADING. Ensure the adjustment rings meet or exceed the loading requirements of AASHTO'S Standard Specification for HS-25 wheel loading for Highway Bridges.

SPECIAL NOTE FOR
ASPHALT MILLING AND TEXTURING
FD04 005-9008-002-005
FD04 085-9008-026-029

Mill out all deformed Asphalt Pavement according to the phasing in the Traffic Control Plan. Mill down to a sufficient depth to eliminate all rutting and deformities. Contrary to Section 408 of the 2000 Standard Specifications, the material obtained from this milling operation shall become the property of the Department. Deliver this material to the State Maintenance facility in Barren County.

SPECIAL NOTES FOR INSTALLATION OF METAL SNOWPLOWABLE PAVEMENT MARKERS FURNISHED BY CONTRACTOR

FD04 005-9008-002-005 FD04 085-9008-026-029
FD04 104-9008-061-064 FD04 100-9008-077-080

Pavement markers shall comply with Section 840 of the 2000 Standard Specifications and Standard Drawing No. TSC-400. Installation, location and spacing shall be in accordance with Section 712 and Standard Drawing Nos. TSC-300, TSC-301, TSC-302, TSC-305, TSC-310, TSC-315, TSC 316, TSC 317, TSC 320, and TSC 325. Contrary to Section 840, the red portion of the lens in the bi-directional (white/red) marker may utilize a plastic shield in lieu of untempered glass.

Flush-mounted Type IV-A markers shall be used to delineate the lane lines, centerlines and edgelines when pavement markers are to be installed on bridge decks. Type V markers are not to be installed on bridge decks.

CERTIFICATION

The Contractor shall provide the following certification from the manufacturer of the castings. This certification must be submitted along with the bid:

> The purchase of the snowplowable castings conveys to the Department of Highways, or its designated agent, the right to remove, reclaim, clean, and reuse these castings in any manner designated by the Department. The manufacturer shall hold no claim for any type of claims of patent infringement.

_____

Manufacturer or
Designated Agent of Manufacturer

SPECIAL NOTES FOR TOLL PLAZA REMOVAL & SIGNING
BARREN, METCALFE, RUSSELL, PULASKI COUNTIES
FD04 005-0065-042-045 FD04 005-9008-002-005
FD04 085-9008-026-029 FD04 104-9008-061-064
FD04 100-9008-077-080

THIS PROJECT IS A FULLY CONTROLLED ACCESS HIGHWAY

I. DESCRIPTION

Except as specified herein, performed all work in accordance with the Department's 2000 Standard Specifications, applicable Standard Drawings, Special Provision 76 Concrete Pavement Replacement and Repairs, and other applicable Special Provisions. Article references are to the Standard Specifications.

The Contractor shall furnish all materials, labor, and equipment for the following work: (1) Removing toll booths and canopy; (2) Removing PCC Pavement and raised traffic island, stabilizing roadbed and replacing with asphalt base and surface; (3) Breaking and seating PCC Pavement and overlaying with asphalt base and surface; (4) removing and replacing guardrail; (5) removing and replacing signs; (6) Maintaining and controlling traffic; and (7) All other work specified as part of this contract.

II. MATERIALS

The Department will sample and test all materials according to Department's Sampling Manual and the Contractor shall have the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing, unless otherwise specified in these notes.

A. Dense Graded Aggregate. Crushed Stone Base may not be furnished in lieu of DGA.

B. Seeding and Protection. Use Seed Mixture No. 1 for seeding and protection.

C. Maintain and Control Traffic. See Traffic Control Plan

III. CONSTRUCTION METHODS

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Shoulder Preparation and Restoration. Prior to placing any lane closures that require shifting traffic onto existing shoulders, the Contractor shall patch the shoulder as directed by the Engineer. Removal of failed materials and additional patching shall be performed by the Contractor as directed by the Engineer during the time the shoulder is used as a travel lane. DGA and asphalt mixtures will be paid at the Contract unit bid prices; all other shoulder preparation and restoration shall be incidental to other items of work.

C. Site Preparation. The Contractor shall be responsible for all site preparation. This item shall include, but is not limited to, excavation, embankment, and backfilling; removal of asphalt and PCC pavement; removal of toll boots, canopy, and all obstructions or any other items; disposal of materials; sweeping and removal of debris; temporary erosion and pollution control; and any other incidentals. All site preparation shall be only as approved or directed by the Engineer. Other than the bid items listed, Site preparation will not be measured for payment but shall be Incidental to other items of work.

D. Remove Canopy. Remove toll plaza canopies, supports and foundations. Backfill holes with DGA or Embankment as directed by the Engineer. See list of exempt items that are to remain property of the Department. Unless otherwise specified the Department will remove these items prior to demolition.

E. Remove Toll Booths. After the Department removes salvageable equipment from the toll booths, remove the toll booths and foundations. Removal of the toll booth facility shall include all items in the vicinity of the booths. This includes (but is not limited to) signs & lights, overhead items, manholes & electrical lines, booths, concrete islands, crash cushions and concrete section behind crash cushions, traffic counting treadles, curbs, median bridge pier bases, and any other miscellaneous concrete. Backfill the holes asphalt base and surface. See list of exempt items that are to remain property of the Department. Unless otherwise specified the Department will remove these items prior to demolition.

F. Removing Rumble Strips. Mill out existing rumble strips on approaches to toll plazas (these rumble strips are located at the existing toll plaza warning signs and may be remote from the other work.). Inlay with asphalt surface.

G. Remove Traffic Counting Treadles. Remove traffic counting treadle. If treadle is in an area that will not be paved as part of this contract, sawcut the pavement to a neat edge and fill the void with Class A Concrete.

H. Signing. See signing notes, drawings and specifications elsewhere in the proposal.

I. Removing and Replacing Pavement. Before removing pavement, remove existing raised pavement markers; contrary to Section 403.03.02, deliver the markers to the Department's bailey bridge yard in Frankfort, KY. Remove the existing PCC pavement and asphalt shoulders as shown on the drawings according to the Special Note for Bridge End Stabilization. All removed materials shall be wasted off the right-of-way at approved sites obtained by the Contractor at no additional cost to the Department. After pavement and shoulder removal, stabilize the underlying base according to the Special Note for Bridge End Stabilization; however Crushed Stone Base may not be furnished in lieu of DGA. Outlet perforated pipe drainage system to perforated pipe headwalls or existing drainage boxes. Positive drainage is required upon completion of construction.

J. Breaking, Seating, and Overlaying. Break and seat PCC pavement at the locations shown on the Drawings. Overlay with 6 inches asphalt base and 1½" asphalt surface.

K. Exempt Items. See list of exempt items that are to remain property of the Department. Unless otherwise specified the Department will remove these items prior to demolition. The Contractor shall remove the following items and store on site at areas designated by the Engineer for pickup by the Department:

- Traffic Counting Treadles
- Overhead Canopy Lights
- Overhead signs (motor & gear boxes)
- Lane 5 Toll Booth at Bon Ayr Toll Plaza

Except for the bid items listed, removal and storage of exempt items to be removed by the Contractor will not be measured for payment but shall be incidental to other items of work..

L. Disposal of Waste. See list of exempt items that are to remain property of the Department. Unless otherwise specified the Department will remove these items prior to demolition. All removed concrete, stell, wiring, lighting, debris, excess excavation, waste, and all other removed items shall be disposed of off the right-of-way at sites obtained by the Contractor at no cost to the Department. No separate payment will be made for the disposal of waste and debris from the project, but shall be incidental to the other items of the work.

M. Final Dressing, Clean Up, and Seeding. After all work is completed, debris from the construction site shall be completely removed from the job site. All excavated areas shall be backfilled and compacted as directed by the Engineer. All disturbed areas shall receive Final Dressing, Class A. Sow all disturbed earthen areas with Seed Mixture No. I. Top-Dressing will not be required. Apply Method 1 and Method 2 Protection of seeded areas as directed by the Engineer; however, asphalt tack will not be required.

N. Restoration. Any roadway features disturbed by the work or the Contractor's operations shall be restored in like kind materials and design as directed by the Engineer, at no additional cost to the Department.

O. On-Site Inspection. Each Contractor submitting a bid for this work shall make a thorough inspection of the site prior to submitting his bid and shall thoroughly familiarize himself with existing conditions so that the work can be expeditiously performed after a contract is awarded. Submission of a bid will be considered evidence of this inspection having been made. Any claims resulting from site conditions will not be honored by the Department.

P. Utility Clearance. Work around and do not disturb utilities for the existing buildings. It is not anticipated that utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities.

IV. METHOD OF MEASUREMENT

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Site Preparation. Other than the bid items listed, Site Preparation will not be measured for payment, but shall be incidental to the other items of the work.

C. Dense Graded Aggregate. In addition to the DGA used in preparation of the base, DGA used for wedging drop-offs and repairing shoulders used as temporary roadways as detailed in the traffic control notes will also be measured for payment.

D. Remove Canopy. Canopies removed will be measured in individual units each.

E. Remove Toll Booths. Toll Booths removed will be measured in individual units each.

F. Remove Traffic Counting Treadles. Traffic counting treadles removed will be measured in individual units each. Class A Concrete to fill voids in areas not to be paved will be measured in cubic yards.

G. Final Dressing, Clean Up, and Seeding. Other than the bid items listed, Final Dressing, Clean Up, and Seeding will not be measured for separate payment, but shall be incidental to other items of work.

H. Roadway Excavation. Contrary to the Special Note for Roadbed stabilization at bridge ends Roadway excavation will not be measured for payment, but shall be incidental to backfilling undercut.

IV. BASIS OF PAYMENT

No direct payment will be made other than for the bid items listed. All other items required to complete the construction shall be incidental to the bid items listed.

A. Maintain and Control Traffic. See Maintenance of Traffic Notes.

B. Site Preparation. Other than the bid items listed, no direct payment will be allowed for site preparation, but shall be incidental to the other items of the work.

C. Remove Canopy. Payment at the contract unit price each shall be full compensation for all labor, equipment, materials and incidental to remove the dispose of canopy and restore disturbed area.

D. Remove Toll Booths. Payment at the contract unit price each shall be full compensation for all labor, equipment, materials and incidental to remove the dispose of toll booths and restore disturbed area.

E. Remove Traffic Counting Treadles. Payment at the contract unit price each for removing treadle and per cubic yard for class A Concrete, as applicable, shall be full compensation for all labor, equipment, materials and incidentals to remove and store traffic counting treadles and restore disturbed area.

F. Remove Toll Booths. Payment at the contract unit price each shall be full compensation for all labor, equipment, materials and incidental to remove the dispose of toll booths and restore disturbed area.

EXEMPTED ITEMS TO BE RETAINED BY DEPARTMENT

Russell Springs Toll Plaza (FD04 104-9008-061-064)

All Lights and Fare Indicators
Crash Barriers/Barrels/Cones
Strobe Lights
Overhead Canopy Lights
Bug Catchers
All Fire Extinguishers
Crash Cushions with Belting & Cylinders
All Treadles
All items inside of the toll booths
Overhead signs (motor & gear boxes)
Free Standing Cabinets

Bon Ayr Toll Plaza (FD04 005-9008-002-005)

All Lights and Fare Indicators
Crash Barriers/Barrels/Cones
Strobe Lights
Overhead Canopy Lights
Bug Catchers
All Fire Extinguishers
Crash Cushions with Belting & Cylinders
All Treadles
All items inside of the toll booths
Overhead signs (motor & gear boxes)
Free Standing Cabinets
Lane 5 Toll Booth

Contractor to take down canopy lights for Toll Facilities

Contractor to set up traffic control and message boards on both sides of plazas at all plazas

EXEMPTED ITEMS TO BE RETAINED BY DEPARTMENT

Edmonton Toll Plaza (FD04 085-9008-026-029)

All Lights and Fare Indicators
Crash Barriers/Barrels/Cones
Strobe Lights
Overhead Canopy Lights
Bug Catchers
All Fire Extinguishers
Crash Cushions with Belting & Cylinders
All Treadles
All items inside of the toll booths
Overhead signs (motor & gear boxes)
Free Standing Cabinets

Nancy Ramps (FD04 100-9008-077-080)

Treadles
All items in the toll booths

Contractor to take down canopy lights for Toll Facilities

Contractor to set up traffic control and message boards on both sides of plazas at all plazas

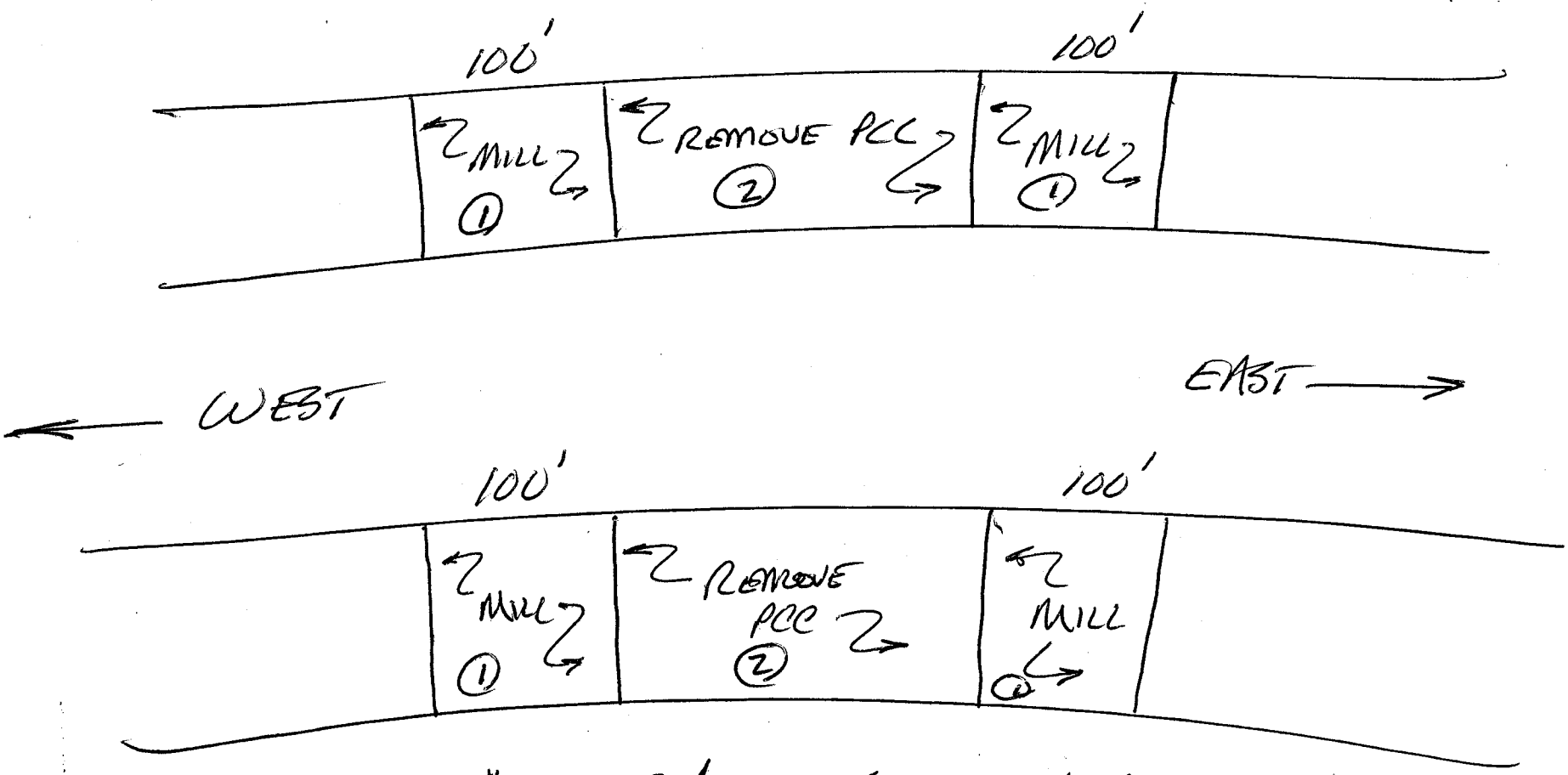
Special Notes & Drawings

for

Barren County
Bon Ayr Toll Plaza

Drawing	Sheet 1 of 1
Traffic Control Plan	Sheets 1 thru 6

BARREN COUNTY TOLL PLAZA
FD04 003-9008-002-005



① INLAY 1½" CLASS 3 ASPHALT SURF 0.50 A PG 76-22

② BACKFILL & UNDERCUT ACCORDING TO SPECIAL NOTE 2E & 12" (3-4" LIFTS) OF CLASS 3 ASPHALT BASE 1.50 D PG 76-22

TRAFFIC CONTROL PLAN
BARREN COUNTY
FD04 005 9008 002-005

THIS PROJECT IS A FULLY CONTROLLED ACCESS HIGHWAY

TRAFFIC CONTROL GENERAL

Except as provided herein, traffic shall be maintained in accordance with the 2000 Standard Specifications and the Standard Drawings, current editions. Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price to "Maintain and Control Traffic".

Contrary to Section 106.01, traffic control devices used on this project may be new, or used in like new condition, at the beginning of the work and maintained in like new condition until completion of the work.

The speed limit in the work zone will be reduced to 55 MPH and double fines for speeding violations will be established. The Contractor shall remove or cover all double fine signs when the highway work zone does not have workers present for more than a two-hour period of time. Payment for the signs shall be at the unit bid price for signs erected. Any relocation and covering of the signs will be incidental to Maintain and Control Traffic.

PROJECT PHASING & CONSTRUCTION PROCEDURES

Lane closures will not be allowed on the following days:

May 23 – 26, 2003	Memorial Day Weekend
July 3 – 7, 2003	Independence Day Weekend
August 29 – September 2, 2003	Labor Day Weekend
November 26 – 30, 2003	Thanksgiving
December 24 – 25, 2003	Christmas

The Engineer may designate additional days and hours when lane closures will not be allowed. Maintain a minimum of one traffic lane in each direction at all times during construction. The clear lane width shall be 10 feet. If traffic should be stopped due to construction operations, and a school bus or any emergency vehicle on an official run arrives on the scene, the Contractor shall make provisions for the passage of the vehicle as quickly as possible.

Phase I:

- The contractor shall have lane closures in place for the two median booth lanes in each direction at MP 3.100 for work on the Toll Booth Plaza at 12:01 AM on May 1, 2003. All traffic will be on the outside lane of mainline pavement and outside toll booth lane at the Toll Plaza.
- The Department will remove exempt items not designated for removal by the Contractor. Allow 15 calendar days for this work.. Maintain lane closure during this period
- Remove Toll Plaza equipment in the closed area. Remove canopy. Stop traffic in no more than 20 minute intervals to remove canopy.
- Remove canopy foundation in median.
- Remove PCC Pavement in the closed area and median area according to the Special Note for Bridge End Stabilization. All removed materials shall be wasted off the right of way at approved sites obtained by the Contractor at no additional cost to the Department.
- Stabilize the underlying base according to the Special Note for Bridge End Stabilization. Crushed Stone Base may not be furnished in lieu of DGA.
- Place 12 Inches of Asphalt Base in the Excavated Area
- Lane closures shall be maintained and work shall continue 24 hours per day, 7 days per week until all the work is completed at this location as detailed in the Special Note for Toll Booth Removal and Replacement.

Phase II

- Switch Traffic to Median Lanes and set up Lane Closure for the outside toll booth lane. All traffic will now be on the Median Lanes
- Remove Toll Plaza equipment in the closed area. Remove canopy foundations on outside lanes.
- Remove PCC Pavement in the closed area according to the Special Note for Bridge End Stabilization. All removed materials shall be wasted off the right of way at approved sites obtained by the Contractor at no additional cost to the Department.
- Stabilize the underlying base according to the Special Note for Bridge End Stabilization. Crushed Stone Base may not be furnished in lieu of DGA.
- Place 12 Inches of Asphalt Base in the Excavated Area
- Lane closures shall be maintained and work shall continue 24 hours per day, 7 days per week until all the work is completed at this location as detailed in the Special Note for Toll Booth Removal and Replacement.
- Begin Work on Mainline Pavement for Entire Project
- Mill out all deformed asphalt pavement. Mill down to a sufficient depth to eliminate all rutting and deformities. Deliver the milled material to Barren County Maintenance Facility.
- Perform all work off of the Asphalt Pavement on the outside lane and shoulders as needed at this time.
- Place 1.5" Asphalt Surface

- Place the Asphalt Shoulders

Phase III

- Switch Traffic to Outside Lanes and set up Lane Closures so that all traffic will now be on the Outside Lanes.
- Mill out all deformed Asphalt Pavement. Mill down to a sufficient depth to eliminate all rutting and deformities. Deliver this milled material to the Barren County State Maintenance Facility.
- Place 1.5" Asphalt Surface
- Place the Asphalt Shoulders
- Construct milled rumble strips in shoulders
- Install Pavement Markings
- Perform all median ditching and final dressing
- Seed all disturbed areas

LANE CLOSURES

Do not allow traffic on the milled surface; maintain lane closures during the interval between milling and resurfacing. Lane closures shall not be left in place during prohibited periods as specified in the Project Phasing. Only one lane closure in each direction of travel will be allowed.

SIGNS

Contrary to Section 112.04.02 and 112.04.03, Low Shoulder signs will not be measured for payment, but will be incidental to Maintain and Control Traffic. Contrary to section 112.04.02, only long term signs (signs intended to be continuously in place for more than 3 days) will be measured for payment; short term signs (signs intended to be left in place for 3 days or less) will not be measured for payment but will be incidental to Maintain and Control Traffic.

Individual signs will be measured only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. Replacements for damaged signs or signs directed to be replaced by the Engineer due to poor legibility or reflectivity will not be measured for payment. Contrary to section 112, short term signs (signs intended to be left in place for 3 days or less) will not be measured for payment but will be incidental to Maintain and Control Traffic.

VARIABLE MESSAGE SIGNS

The Contractor shall provide a minimum of two Variable Message Signs, one in advance of or on the project in each direction at locations to be determined by the Engineer. The locations designated may vary as the work progresses. The messages required to be provided shall be designated by the Engineer. The Variable Message Signs shall be in operation at all times. In the event of damage or mechanical/electrical failure, the Contractor shall repair or replace the Variable Message Sign within 24 hours. The Department will not take delivery of the Variable message signs upon completion of the work.

BARRICADES

Barricades used in lieu of barrels and cones for channelization or delineation will be incidental to Maintain and Control Traffic according to Section 112.04.01. Barricades used to protect pavement removal areas will be bid as each according to Section 112.04.04. Individual barricades will be measured only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. Replacements for damaged barricades or barricades directed to be replaced by the Engineer due to poor condition or reflectivity will not be measured for payment.

PAVEMENT MARKINGS

Remove or cover the lenses of raised pavement markers that do not conform to the traffic control scheme in use, or as directed by the Engineer. Lenses shall be replaced or uncovered before a closed lane is reopened to traffic. No direct payment will be made for removing and replacing or covering and uncovering the lenses, but shall be incidental to "Maintain and Control Traffic". Do not remove raised pavement markers until immediately prior to Phase II. Replace pavement markings after permanent striping for lane lines is placed.

Temporary and permanent striping shall be in accordance with Section 112, except that:

(1) Temporary Striping shall be 6" in width; and
(2) If the contractor's operations or phasing requires temporary markings which must be subsequently removed from the ultimate pavement, an approved "Removable Lane Tape" shall be used; however removable lane tape will be measured and pad as Temporary striping painted line.
(3) Edge lines will be required for temporary striping; and
(4) Temporary or permanent striping shall be in place before a lane is opened to traffic; and
(5) Permanent striping shall be 6" Paint.

TRAFFIC COORDINATOR

Designate an employee to be traffic coordinator. The Traffic Coordinator shall inspect the project maintenance of traffic once every two hours during the Contractor's operations and at any time a lane closure is in place. The Traffic Coordinator shall report all incidents throughout the work zone to the Engineer on the project. The Contractor shall furnish the name and telephone number where the Traffic Coordinator can be contacted at all times.

During any period when a lane closure is in place, the Traffic Coordinator shall arrange for personnel to be present on the project at all times to inspect the traffic control and to maintain the signing and devices. The personnel shall have access on the project to a radio or telephone to be used in case of emergencies or accidents.

COORDINATION OF WORK

The Contractor is advised that other projects may be in progress within or in the near vicinity of this project. The traffic control of those projects may affect this project and the traffic control of this project may affect those projects. The Contractor shall coordinate the work on this project with the work of the other contractors. In case of conflict, the Engineer will determine the relative priority to give to work phasing on the various projects.

PAVEMENT EDGE DROP-OFFS

Pavement edges that traffic is not expected to cross, except accidentally, shall be treated as follows:

Less than 2" - No protection required.

2" to 4" - Place plastic drums, vertical panels, or barricades every 50 feet. Cones may be used in place of plastic drums, panels, and barricades during daylight working hours. Wedge with asphalt mixture for leveling and wedging with a 1:1 or flatter slope in daylight hours, or 3:1 or flatter slope during nighttime hours, when work is not active in the drop-off area.

Greater than 4" - Protect with a lane or shoulder closure using drums or barricades; cones will not be allowed. If traffic is less than 10 feet from the excavated area, drum or barricade spacing shall not exceed 20 feet. Place Type III Barricades facing oncoming traffic at each drop off until all asphalt base courses are placed or the excavated areaw are filled. Place pavement and backfill excavated areas according to the phasing; if work is interrupted by inclement weather or for any other reason such that the new pavement cannot be placed on the same day the trench is excavated, protect any drop-offs within 10 feet of a travel lane with a DGA wedge

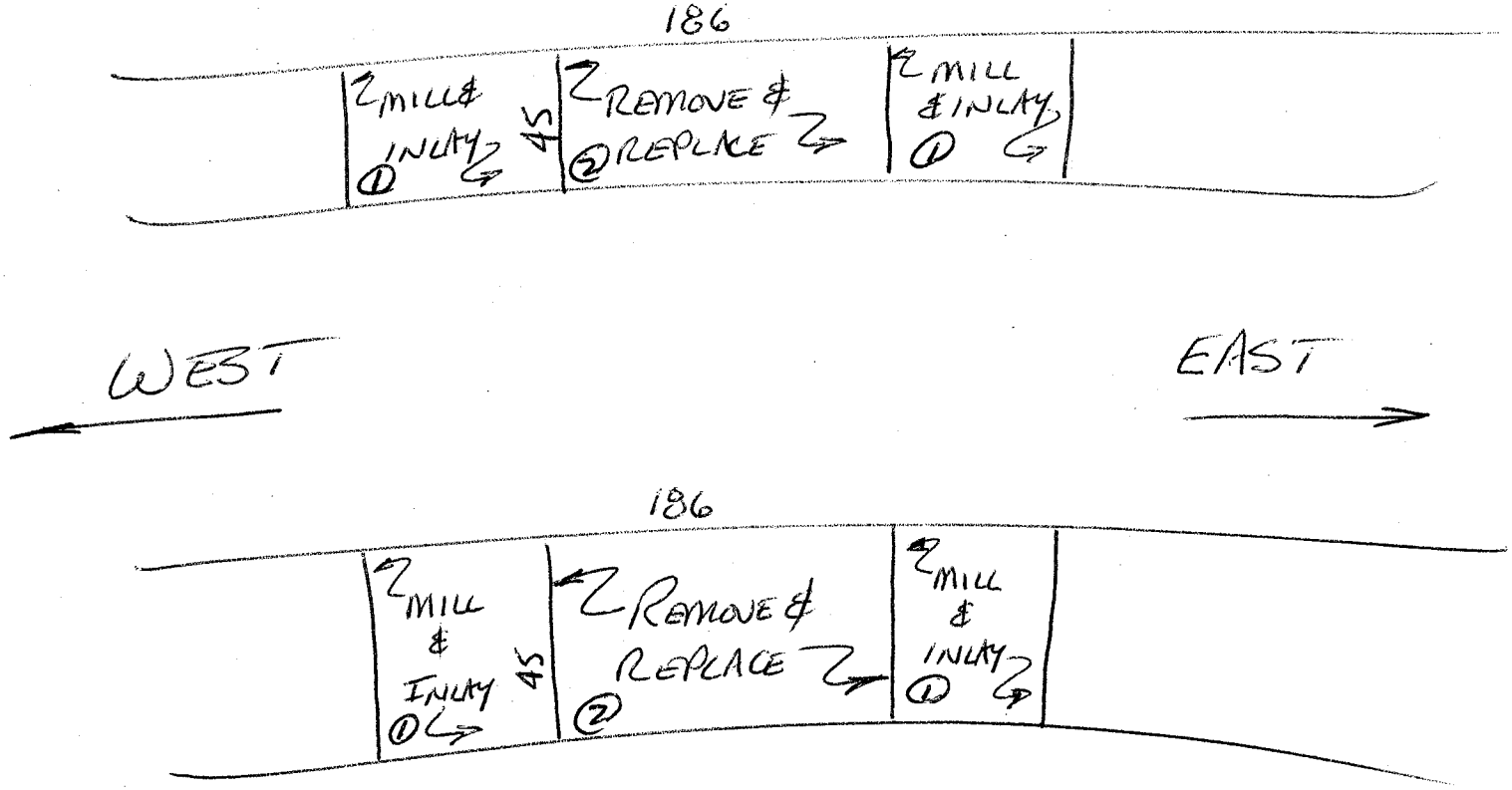
or cuttings from trench with 3:1 or flatter slope; the wedge shall be removed and the new pavement placed as soon as the weather permits. In lieu of a wedge, small areas of 4 feet or less in their least dimension may be covered by a ¾ inch steel plate when work is not actively in progress at the pavement removal area; the plate shall be anchored to the pavement by any method approved by the Engineer that will prevent it being dislodged by accidental impact. While workers are present in excavated areas greater than 4 inches located less than 10 feet from traffic, protect work zone with a TMA.

Special Notes & Drawings

for

Metcalfe County
Edmonton Toll Plaza

EDMONTON TOLL PLAZA
FD04 085-9008-026-029



① INLAY 1½" CLASS 3 ASPHALT SURFACE 0.50 A PG 76-22

② BACKFILL & UNDERCUT ACCORDING TO SPECIAL NOTE 26 & 12" (3-4" LIFTS) CLASS 3 ASPHALT BASE 1.50 D PG 76-22

LN 9008 Parkway Remediation - 2003
085 9008 026-029

Eastbound guardrail end treatments

Milepoint	Type Needed	Notes
26.913	XXXXXXX	median this rail will be removed upon toll plaza shutdown
26.960	XXXXXXX	median this rail will be removed upon toll plaza shutdown
27.038	2a	
27.450	9	median overpass
27.530	9	median overpass
27.787	1	

L. Nunn Parkway Remediation - 2003
085 9008 026-029

Westbound guardrail end treatments

milepoint	type needed	notes
27.441	2a	
27.483	1	
27.749	XXXXXXXX	median

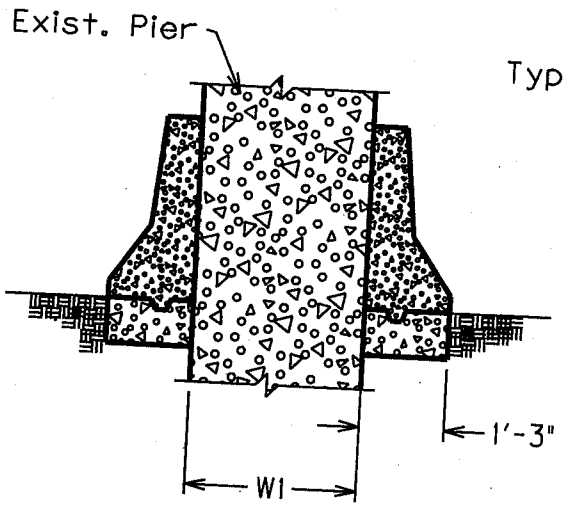
Totals for Guardrail End Treatments
085 9008 026-029

Install type 1	2
Install type 2a	2
Install type 9	2
Install guardrail W-beam	550
Remove guardrail (single face)	900

Metcalfe County

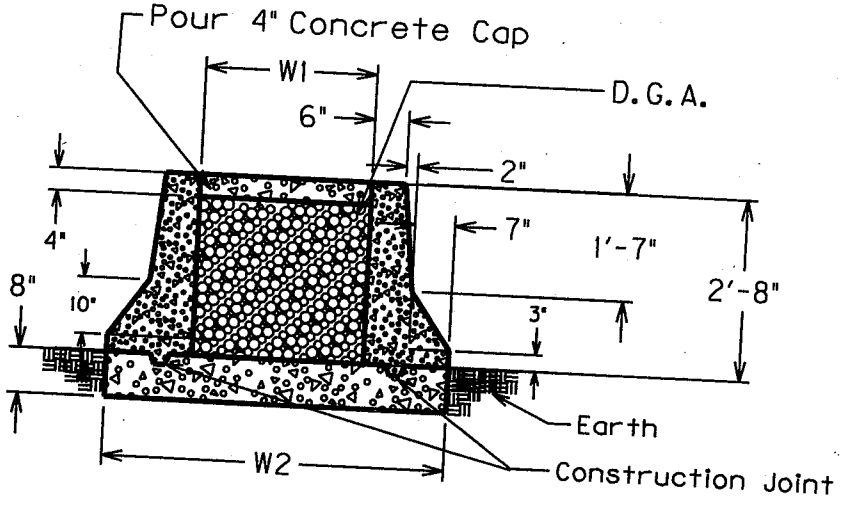
F005 085-9008-026-029

Typical Barrier Wall Sections at Bridge Locations

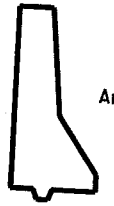


At Piers

Milepoint	W1	W2	D.G.A.	At Piers	Btwn Piers
27.490	3'-6"	6'-0"	8.167 SF	4.903 SF	9.236 SF



Between Piers



Area = 2.035 Sq.Ft.

(1)

FD04 085 9008 -026 -029

SPECIAL NOTES FOR GUARDRAIL PROJECT

I. DESCRIPTION

This work shall be performed in accordance with the Department's 2000 Standard Specifications and Interim Supplemental Specifications, applicable Standard Drawings, and applicable Special Provisions except as hereafter specified. Article references are to the Standard Specifications.

This work shall consist of: (1) removing existing guardrail and end treatments as detailed in the guardrail summary sheet; (2) furnishing and installing guardrail, end treatments, and crash cushions as detailed in the guardrail summary sheets; (3) maintaining and controlling traffic; (4) any other work as specified this contract.

II. MATERIALS

Except as specified in these notes, or elsewhere in the drawings or this proposal, all materials shall be in accordance with the Standard Specifications, Standard Drawings, and applicable Special Provisions. All materials shall be sampled and tested in accordance with the Department's Sampling Manual and the materials shall be available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing unless otherwise specified in these Notes.

A. **Seeding and Protection.** ~~Fertilizer shall be 10-20-20. Agricultural Limestone will not be required.~~ Use Seed Mixture No. 1. ~~Protection shall be Method 2, except that bituminous tack material will not be required~~.

B. **Guardrail, Steel "W" Beam Single Face, Guardrail end Treatments, and Crash Cushions.** Materials in guardrail systems shall meet requirements in Section 814, the Standard drawings, and Active Sepia drawings.

III. CONSTRUCTION METHODS

Except as specified in these notes, or elsewhere in the drawings or this proposal, all construction methods shall be in accordance with the Standard Specifications.

A. **Maintain and Control Traffic**. See Special Notes for Maintenance of Traffic. Any temporary lane closures that may be necessary to complete the work on guardrail, end treatment, or crash cushion installation after the primary lane closures detailed in the Traffic Control Plan are removed will be considered incidental to Maintain and Control Traffic and will NOT be measured for payment.

FD04 085 9008-026-029

SPECIAL NOTES FOR GUARDRAIL PROJECT

B. **Site Preparation.** The Contractor will be responsilbe for all site preparation for the new guardrail systems. This item shall include, but is not limited to, incidental excavation and embankment, removal of obstructions or any other itmes, disoposal of materials, and temporary erosion control, and seeding and protection. All embankments necessary for end treatment and crash cushion installation shall be constructed with DGA and shall be placed and compacted as detailed in the Department's 2000 Standard Specifications or as directed by the Engineer. In ditch areas with substantial drainage, #2 Stone shall be used for embankment construction in lieu of DGA and shall be placed as directed by the Engineer in order to maintain positive drainage. All back slopes, tapers and grades shown on the Department's 2000 Standard Drawings for each type of end treatment and crash cushion shall be constructed as detailed on the applicable Standard Drawing. Staking will be required by the contractor to ensure that all tapers, grades and slopes match the applicable Standard Drawing. Staking will be NOT be measured for payment and will be considered incidental to the installation of end treatments and crash cushions. Site preparation will not be measured for payment except for the amount of DGA and No. 2 stone used, which will be paid for by the ton for actual quantity used.

C. **Remove Guardrail and End Treatments.** Remove all existing guardrail and end treatments as shown in the Guardrail Summary. Contrary to Section 719.03.07, deliver the salvaged guardrail and components to the Departments Bailey Bridge Yard located on Wilkinson Boulevard in Frankfort, Kentucky.

D. **Construct Concrete median Barrier End for Crash Cushion Type IX.** Construct Concrete median Barrier End for Crash Cushion Type IX as shown in Special Note for Concrete median Barrier End for Crash Cushion Type IX.

E. **Guardrail, End Treatment, and Crash Cushion Installation**. The Contractor shall furnish all guardrail end treatments, crash cushions, guardrail, steel "W" beam guardrail single face, guardrail posts, 6 ft. guardrail posts, offset blocks, backup plates, radius rail, and hardware necessary to install guardrail-steel "W" beam – single face. Construct guardrail systems in accordance with Section 719, these special notes, and all applicable Standard Drawings. When installing guardrail the blunt end shall **NOT** be left exposed where it would be hazardous to the public. When it is not practical to complete the construction of the rail or the permanent end treatments first, the Engineer may require a temporary end of connecting at least 25 feet of rail to the last post, and by slightly flaring, and burying the end of the rail completely into the existing shoulder. If left overnight, a drum with bridge panel as

detailed on ~~Sepia~~ Drawings for Miscellaneous Traffic Control Devices shall be placed in advance of the guardrail end and maintained during use. The cost of the temporary end, including the barrier and panel, shall be included in the unit price for guardrail - steel "W" beam - single face.

The guardrail shall be erected to the lines and grades shown on current Standard Drawings or as designated by the Engineer. Unless otherwise directed, the guardrail adjacent to paved shoulders shall be constructed 27 inches above true theoretical shoulder elevations, or by any method approved by the Engineer which allows the construction of the guardrail to the true grade and prevents apparent sags.

The edges of all holes punched in the rail and posts, and all scratches or marred areas in completed installations where the galvanizing has been damaged, shall be spot painted with 2 coats of zinc dust-zinc oxide paint conforming to the current issue of Federal Specification TT-P-641.

Mileposts listed on the guardrail summary are approximate only. The Engineer will determine the exact termini for individual guardrail installations.

C. **Guardrail end treatment, crash cushion, bridge end connector and terminal section installation**. The Contractor shall furnish all equipment, materials, labor, and any incidentals required to complete the installation of the end treatments, crash cushions, bridge end connectors and terminal sections, as applicable to the project. The Contractor shall install guardrail end treatments, bridge end connectors, and terminal sections in accordance with Section 719, these special notes, the guardrail summary and all applicable standard drawings.

D. **On-Site Inspection.** Each Contractor submitting a bid for this work shall make a thorough inspection of the site prior to submitting his bid and shall thoroughly familiarize himself with existing conditions so that the work can be expeditiously performed after a contract is awarded. Submission of a bid will be considered evidence of this inspection having been made. Any claims resulting from site conditions will NOT be honored by the Department.

E. **Before You Dig.** The Contractor shall be responsible for all requirements and conformance with the *Underground Facility Damage Prevention Act of 1994.* The Contractor will be responsible for locating any utilities on this project. The Contractor is advised that he can call 1-800-752-6007 toll free a minimum of 2 working days prior to excavation for information on the locations of some but not necessarily all existing underground utilities. All underground utilities shall be located prior to construction. Any utilities disturbed or damaged as a result of the Contractor's operations will be repaired at the Contractor's own expense to the satisfaction of the utility owner.

In all instances, the Contractor shall be responsible for repairing any damage done to underground facilities such as, but no limited to, electrical conduit, perforated pipe, culvert pipe, drainage structures, etc., as the result of removing of guardrail posts and end treatments. The Contractor shall take particular care to assure that removal of the existing guardrail system does not disturb the luminaries or underground wiring. If electrical service is damaged, it shall be repaired immediately. Any utilities disturbed or damaged as a result of the Contractor's operations will be repaired to the satisfaction of the utility owner at the Contractor's expense.

E. **Restoration.** Any roadway features disturbed by the work or the Contractor's operations shall be restored in like kind materials and design as directed by the Engineer, at no additional cost to the Department.

F. **Property Damage.** The Contractor will be responsible for all damage to public and/or private property resulting from his work.

G. **Permanent Signing.** The Department will be responsible for all necessary permanent signing required by the construction. The Engineer will coordinate the Department's and Contractor's operations.

H. **Disposal of Waste.** All removed concrete, debris, excess excavation, and other waste shall be disposed of off the right-of-way at approved sites obtained by the Contractor at no cost to the Department. No separate payment will be made for the disposal of waste and debris from the project, but shall be incidental to the other items of the work.

I. **Utility Clearance.** It is not anticipated that utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities, and working days will not be charged for those days on which work on the controlling item is delayed, as provided in the Specifications. If the total delay exceeds ten working days, an extension of the specified completion date will be negotiated with the Contractor for delay to the contractor's work.

IV. METHOD OF MEASUREMENT

Except as specified in these notes, or elsewhere in the drawings or this proposal, the method of measurement will be in accordance with the Standard Specifications.

SPECIAL NOTES FOR GUARDRAIL PROJECT

A. **Maintain and Control Traffic.** See Special notes for Maintenance of Traffic.

B. **Guardrail End Treatments and Terminal Sections**. See Section 719.

V. BASIS OF PAYMENT

Except as specified in these notes, or elsewhere in the drawings or this proposal, basis of payment will be in accordance with the Standard Specifications.

A. **Maintain and Control Traffic.** See Special notes for Maintenance of Traffic.

B. **Guardrail End Treatments and Terminal Sections**. See Section 719.

TRAFFIC CONTROL PLAN
METCALFE COUNTY
FD04 085 9008 026-029

THIS PROJECT IS A FULLY CONTROLLED ACCESS HIGHWAY

TRAFFIC CONTROL GENERAL

Except as provided herein, traffic shall be maintained in accordance with the 2000 Standard Specifications and the Standard Drawings, current editions. Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price to "Maintain and Control Traffic".

Contrary to Section 106.01, traffic control devices used on this project may be new, or used in like new condition, at the beginning of the work and maintained in like new condition until completion of the work.

The speed limit in the work zone will be reduced to 55 MPH and double fines for speeding violations will be established. The Contractor shall remove or cover all double fine signs when the highway work zone does not have workers present for more than a two-hour period of time. Payment for the signs shall be at the unit bid price for signs erected. Any relocation and covering of the signs will be incidental to Maintain and Control Traffic.

PROJECT PHASING & CONSTRUCTION PROCEDURES

Lane closures will not be allowed on the following days:

May 23 – 26, 2003	Memorial Day Weekend
July 3 – 7, 2003	Independence Day Weekend
August 29 – September 2, 2003	Labor Day Weekend
November 26 – 30, 2003	Thanksgiving
December 24 – 25, 2003	Christmas

The Engineer may designate additional days and hours when lane closures will not be allowed. Maintain a minimum of one traffic lane in each direction at all times during construction. The clear lane width shall be 10 feet. If traffic should be stopped due to construction operations, and a school bus or any emergency vehicle on an official run arrives on the scene, the Contractor shall make provisions for the passage of the vehicle as quickly as possible.

Phase I:

- The contractor shall have lane closures in place for the two median booth lanes in each direction at MP 27.50 for work on the Toll Booth Plaza at 12:01 AM on May 1, 2003. All traffic will be on the outside lane of mainline pavement and outside toll booth lane at the Toll Plaza.
- The Department will remove exempt items not designated for removal by the Contractor. Allow 15 calendar days for this work.. Maintain lane closure during this period
- Remove Toll Plaza equipment in the closed area.
- Remove PCC Pavement in the closed area and median area according to the Special Note for Bridge End Stabilization. All removed materials shall be wasted off the right of way at approved sites obtained by the Contractor at no additional cost to the Department.
- Stabilize the underlying base according to the Special Note for Bridge End Stabilization. Crushed Stone Base may not be furnished in lieu of DGA.
- Place 12 inches of Asphalt Base in the Excavated Area
- Mill out all deformed asphalt pavement. Mill down to a sufficient depth to eliminate all rutting and deformities. Deliver the milled material to Barren County Maintenance Facility. Place 1½ inches Asphalt Surface in milled areas and over asphalt base.
- Install crash cushions at median bridge piers.
- Lane closures shall be maintained and work shall continue 24 hours per day, 7 days per week until all the work is completed at this location as detailed in the Special Note for Toll Booth Removal and Replacement.
- Maintain ingress and egress at all times for all ramps to/from US 68; if needed, use shoulders for ramp traffic.

Phase II

- Switch Traffic to Median Lanes and set up Lane Closure for the outside toll booth lane. All traffic will now be on the Median Lanes
- Remove Toll Plaza equipment in the closed area..
- Remove PCC Pavement in the closed area according to the Special Note for Bridge End Stabilization. All removed materials shall be wasted off the right of way at approved sites obtained by the Contractor at no additional cost to the Department.
- Stabilize the underlying base according to the Special Note for Bridge End Stabilization. Crushed Stone Base may not be furnished in lieu of DGA.
- Place 12 Inches of Asphalt Base in the Excavated Area.
- Mill out all deformed asphalt pavement. Mill down to a sufficient depth to eliminate all rutting and deformities. Deliver the milled material to Barren County Maintenance Facility. Place 1½ inches Asphalt Surface in milled areas and over asphalt base.
- Install guardrail and end treatments at the outside bridge piers.

- Lane closures shall be maintained and work shall continue 24 hours per day, 7 days per week until all the work is completed at this location as detailed in the Special Note for Toll Booth Removal and Replacement.
- Maintain ingress and egress at all times for all ramps to/from US 68; if needed, use shoulders for ramp traffic

General Notes:

The contractor is encouraged to schedule and complete barrier walls between bridge piers and the installation of new guardrail, end treatments, and crash cushions before the paving operations are complete so as to minimize damage to the newly constructed surface caused by heavy equipment. Any damage to the riding surface due to the contractors equipment traveling over the newly paved surface shall be repaired to the satisfaction of the Engineer at no expense to the Department. Also, any temporary lane closures required to complete the previously mentioned work after the primary lane closures have been moved shall not be measured for payment and will be considered incidental to Maintain and Control Traffic.

LANE CLOSURES

Do not allow traffic on the milled surface; maintain lane closures during the interval between milling and resurfacing. Lane closures shall not be left in place during prohibited periods as specified in the Project Phasing. Only one lane closure in each direction of travel will be allowed. Each lane closure may extend the entire length of the project provided ingress and egress is provided at all times for all ramps to/from US 68; if needed, use shoulders for ramp traffic

SIGNS

Contrary to Section 112.04.02 and 112.04.03, Low Shoulder signs will not be measured for payment, but will be incidental to Maintain and Control Traffic. Contrary to section 112.04.02, only long term signs (signs intended to be continuously in place for more than 3 days) will be measured for payment; short term signs (signs intended to be left in place for 3 days or less) will not be measured for payment but will be incidental to Maintain and Control Traffic.

Individual signs will be measured only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. Replacements for damaged signs or signs directed to be replaced by the Engineer due to poor legibility or reflectivity will not be measured for payment. Contrary to section 112, short term signs (signs intended to be left in place for 3 days or less) will not be measured for payment but will be incidental to Maintain and Control Traffic.

VARIABLE MESSAGE SIGNS

The Contractor shall provide a minimum of two Variable Message Signs, one in advance of or on the project in each direction at locations to be determined by the Engineer. The locations designated may vary as the work progresses. The messages required to be provided shall be designated by the Engineer. The Variable Message Signs shall be in operation at all times. In the event of damage or mechanical/electrical failure, the Contractor shall repair or replace the Variable Message Sign within 24 hours. The Department will not take delivery of the Variable message signs upon completion of the work.

BARRICADES

Barricades used in lieu of barrels and cones for channelization or delineation will be incidental to Maintain and Control Traffic according to Section 112.04.01. Barricades used to protect pavement removal areas will be bid as each according to Section 112.04.04. Individual barricades will be measured only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. Replacements for damaged barricades or barricades directed to be replaced by the Engineer due to poor condition or reflectivity will not be measured for payment.

PAVEMENT MARKINGS

Remove or cover the lenses of raised pavement markers that do not conform to the traffic control scheme in use, or as directed by the Engineer. Lenses shall be replaced or uncovered before a closed lane is reopened to traffic. No direct payment will be made for removing and replacing or covering and uncovering the lenses, but shall be incidental to "Maintain and Control Traffic". Do not remove raised pavement markers until immediately prior to Phase II. Replace pavement markings after permanent striping for lane lines is placed.

Temporary and permanent striping shall be in accordance with Section 112, except that:

(1) Temporary Striping shall be 6" in width; and
(2) If the contractor's operations or phasing requires temporary markings which must be subsequently removed from the ultimate pavement, an approved "Removable Lane Tape" shall be used; however removable lane tape will be measured and pad as Temporary striping painted line.
(3) Edge lines will be required for temporary striping; and
(4) Temporary or permanent striping shall be in place before a lane is opened to traffic; and
(5) Permanent striping shall be 6" Paint.

TRAFFIC COORDINATOR

Designate an employee to be traffic coordinator. The Traffic Coordinator shall inspect the project maintenance of traffic once every two hours during the Contractor's operations and at any time a lane closure is in place. The Traffic Coordinator shall report all incidents throughout the work zone to the Engineer on the project. The Contractor shall furnish the name and telephone number where the Traffic Coordinator can be contacted at all times.

During any period when a lane closure is in place, the Traffic Coordinator shall arrange for personnel to be present on the project at all times to inspect the traffic control and to maintain the signing and devices. The personnel shall have access on the project to a radio or telephone to be used in case of emergencies or accidents.

COORDINATION OF WORK

The Contractor is advised that other projects may be in progress within or in the near vicinity of this project. The traffic control of those projects may affect this project and the traffic control of this project may affect those projects. The Contractor shall coordinate the work on this project with the work of the other contractors. In case of conflict, the Engineer will determine the relative priority to give to work phasing on the various projects.

PAVEMENT EDGE DROP-OFFS

Pavement edges that traffic is not expected to cross, except accidentally, shall be treated as follows:

Less than 2" - No protection required.

2" to 4" - Place plastic drums, vertical panels, or barricades every 50 feet. Cones may be used in place of plastic drums, panels, and barricades during daylight working hours. Wedge with asphalt mixture for leveling and wedging with a 1:1 or flatter slope in daylight hours, or 3:1 or flatter slope during nighttime hours, when work is not active in the drop-off area.

Greater than 4" - Protect with a lane or shoulder closure using drums or barricades; cones will not be allowed. If traffic is less than 10 feet from the excavated area, drum or barricade spacing shall not exceed 20 feet. Place Type III Barricades facing oncoming traffic at each drop off until all asphalt base courses are placed or the excavated areaw are filled. Place pavement and backfill excavated areas according to the phasing; if work is interrupted by inclement weather or for any other reason such that the new pavement cannot be placed on the same day the trench is excavated, protect any drop-offs within 10 feet of a travel lane with a DGA wedge

or cuttings from trench with 3:1 or flatter slope; the wedge shall be removed and the new pavement placed as soon as the weather permits. In lieu of a wedge, small areas of 4 feet or less in their least dimension may be covered by a ¾ inch steel plate when work is not actively in progress at the pavement removal area; the plate shall be anchored to the pavement by any method approved by the Engineer that will prevent it being dislodged by accidental impact. While workers are present in excavated areas greater than 4 inches located less than 10 feet from traffic, protect work zone with a TMA.

Special Notes & Drawings

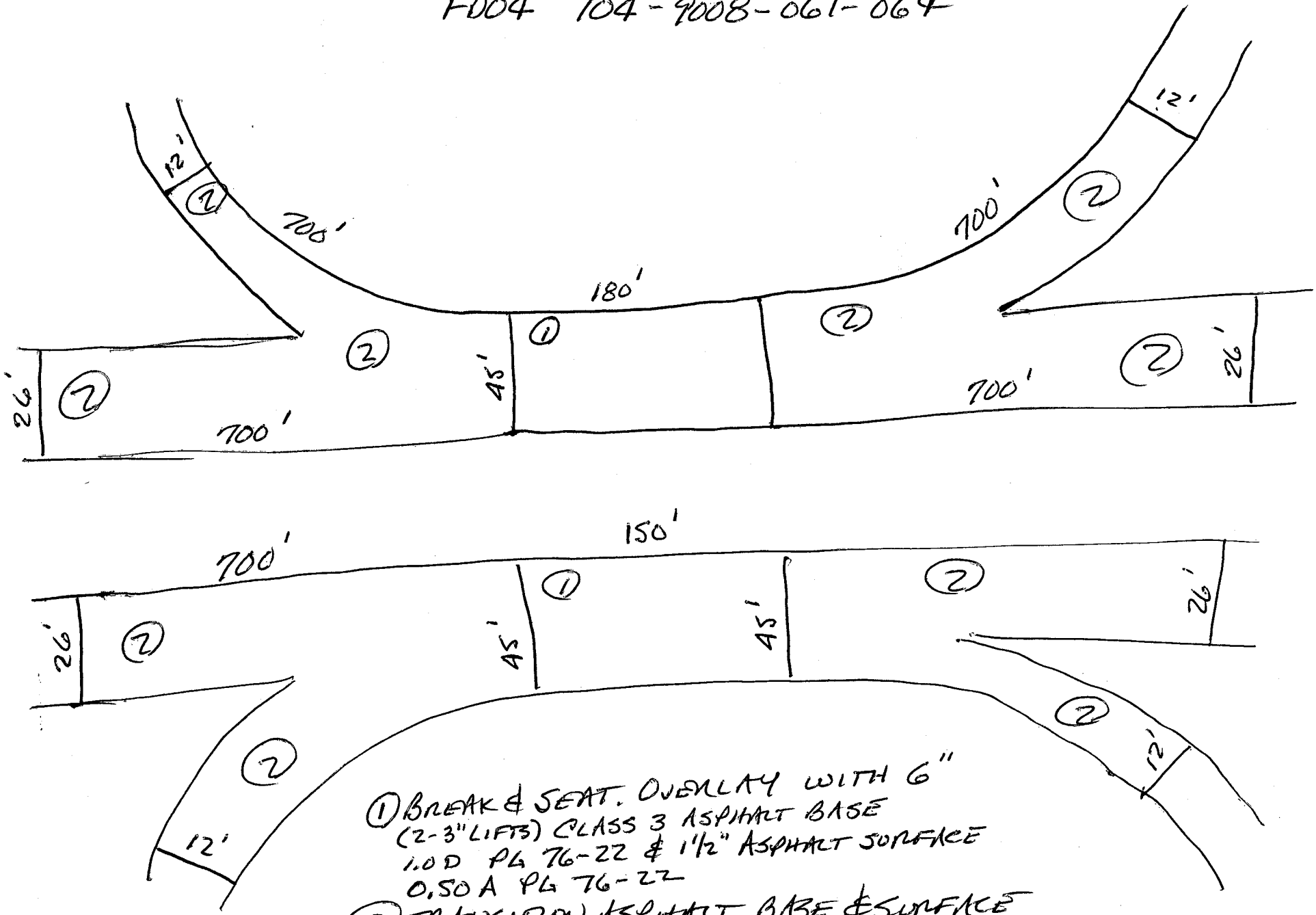
for

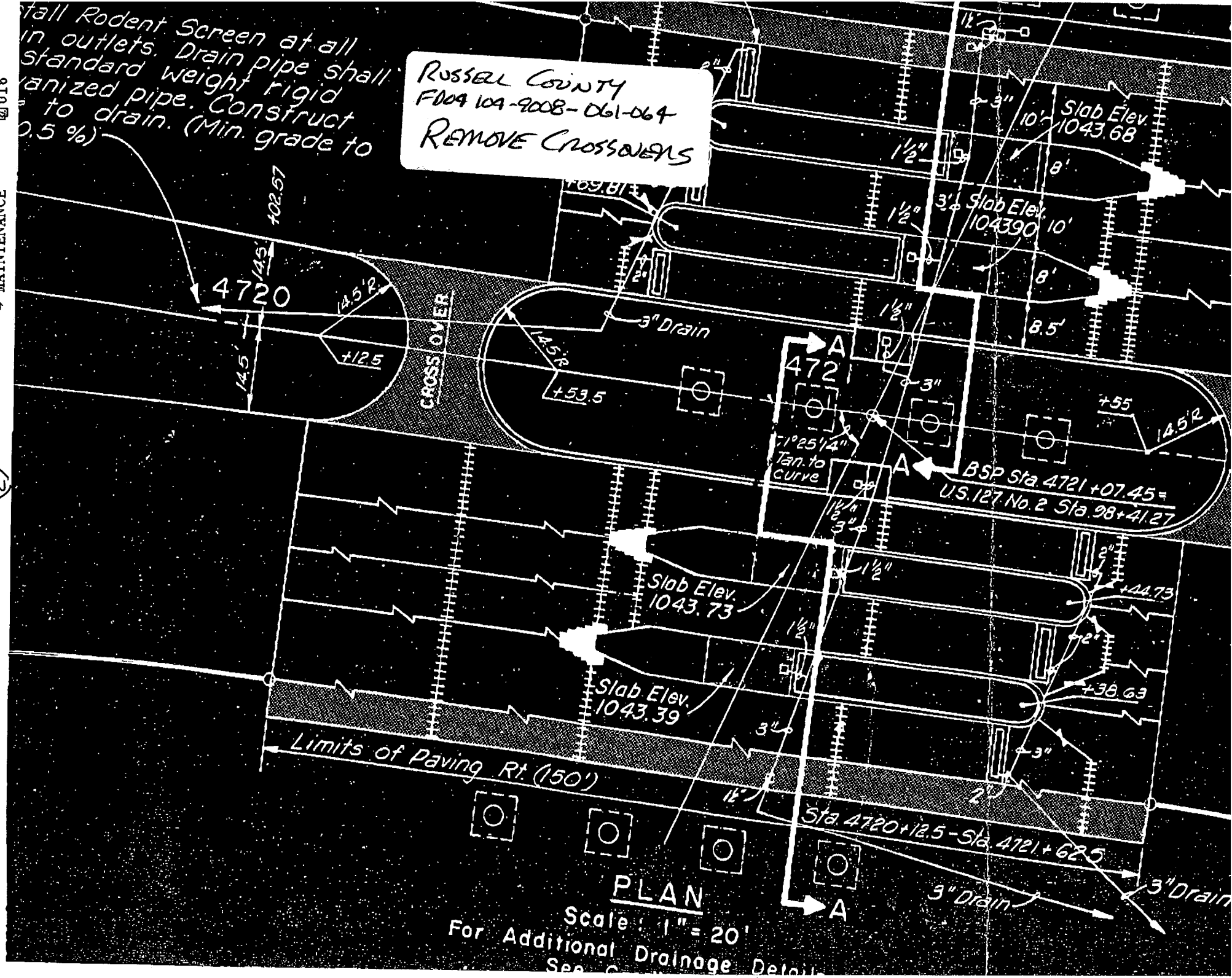
Russell County
Russell Springs Toll Plaza

Drawings	Sheets 1 thru 2
Traffic Control Plan	Sheets 1 thru 5

RUSSELL COUNTY

FD04 104-9008-061-069





TRAFFIC CONTROL PLAN
RUSSELL COUNTY
FD04 104-9008-061-064

THIS PROJECT IS A FULLY CONTROLLED ACCESS HIGHWAY

TRAFFIC CONTROL GENERAL

Except as provided herein, traffic shall be maintained in accordance with the 2000 Standard Specifications and the Standard Drawings, current editions. Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price to "Maintain and Control Traffic".

Contrary to Section 106.01, traffic control devices used on this project may be new, or used in like new condition, at the beginning of the work and maintained in like new condition until completion of the work.

The speed limit in the work zone will be reduced to 55 MPH and double fines for speeding violations will be established. The Contractor shall remove or cover all double fine signs when the highway work zone does not have workers present for more than a two-hour period of time. Payment for the signs shall be at the unit bid price for signs erected. Any relocation and covering of the signs will be incidental to Maintain and Control Traffic.

PROJECT PHASING & CONSTRUCTION PROCEDURES

Lane closures will not be allowed on the following days:

May 23 – 26, 2003	Memorial Day Weekend
July 3 – 7, 2003	Independence Day Weekend
August 29 – September 2, 2003	Labor Day Weekend
November 26 – 30, 2003	Thanksgiving
December 24 – 25, 2003	Christmas

The Engineer may designate additional days and hours when lane closures will not be allowed. Maintain a minimum of one traffic lane in each direction at all times during construction. The clear lane width shall be 10 feet. If traffic should be stopped due to construction operations, and a school bus or any emergency vehicle on an official run arrives on the scene, the Contractor shall make provisions for the passage of the vehicle as quickly as possible.

Phase I:

- The contractor shall have lane closures in place for the two median booth lanes in each direction at MP 62.42 for work on the Toll Booth Plaza at 12:01 AM on May 1, 2003. All traffic will be on the outside lane of mainline pavement and outside toll booth lane at the Toll Plaza.
- The Department will remove exempt items not designated for removal by the Contractor. Allow 15 calendar days for this work.. Maintain lane closure during this period.
- Remove Toll Plaza equipment in the closed area and fill the holes with asphalt base.
- Break and seat PCC Pavement in the closed area according to the Section 504. Remove all pavement markers in area to receive the asphalt transition.
- Place 6" asphalt base (two 3" lifts) over broken and seated PCC Pavement. Transition asphalt base as shown on the drawings.
- Install crash cushions at median bridge piers.
- Lane closures shall be maintained and work shall continue 24 hours per day, 7 days per week until all the work is completed at this location as detailed in the Special Note for Toll Booth Removal and Replacement.
- Maintain ingress and egress at all times for all ramps to/from US 127; if needed, use shoulders for ramp traffic.

Phase II

- Switch Traffic to Median Lanes and set up Lane Closure for the outside toll booth lane. All traffic will now be on the Median Lanes
- Remove Toll Plaza equipment in the closed area and fill holes with asphalt base.
- Break and seat PCC Pavement in the closed area according to the Section 504. Remove all pavement markers in area to receive the asphalt transition.
- Place 6" asphalt base (two 3" lifts) over broken and seated PCC Pavement. Transition asphalt base as shown on the drawings.
- Install guardrail and end treatments at outside bridge piers.
- Lane closures shall be maintained and work shall continue 24 hours per day, 7 days per week until all the work is completed at this location as detailed in the Special Note for Toll Booth Removal and Replacement.
- Maintain ingress and egress at all times for all ramps to/from US 127; if needed, use shoulders for ramp traffic.

Phase III

- Place 1 ½" asphalt surface overall

General Notes:

The contractor is encouraged to schedule and complete barrier walls between bridge piers and the installation of new guardrail, end treatments, and crash cushions before the paving operations are complete so as to minimize damage to the newly constructed surface caused by heavy equipment. Any damage to the riding surface due to the contractors equipment traveling over the newly paved

surface shall be repaired to the satisfaction of the Engineer at no expense to the Department. Also, any temporary lane closures required to complete the previously mentioned work after the primary lane closures have been moved shall not be measured for payment and will be considered incidental to Maintain and Control Traffic.

LANE CLOSURES

Do not allow traffic on the milled surface; maintain lane closures during the interval between milling and resurfacing. Lane closures shall not be left in place during prohibited periods as specified in the Project Phasing. Only one lane closure in each direction of travel will be allowed. Each lane closure may extend the entire length of the project provided ingress and egress is provided at all times for all ramps to/from US 68; if needed, use shoulders for ramp traffic

SIGNS

Contrary to Section 112.04.02 and 112.04.03, Low Shoulder signs will not be measured for payment, but will be incidental to Maintain and Control Traffic. Contrary to section 112.04.02, only long term signs (signs intended to be continuously in place for more than 3 days) will be measured for payment; short term signs (signs intended to be left in place for 3 days or less) will not be measured for payment but will be incidental to Maintain and Control Traffic.

Individual signs will be measured only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. Replacements for damaged signs or signs directed to be replaced by the Engineer due to poor legibility or reflectivity will not be measured for payment. Contrary to section 112, short term signs (signs intended to be left in place for 3 days or less) will not be measured for payment but will be incidental to Maintain and Control Traffic.

VARIABLE MESSAGE SIGNS

The Contractor shall provide a minimum of two Variable Message Signs, one in advance of or on the project in each direction at locations to be determined by the Engineer. The locations designated may vary as the work progresses. The messages required to be provided shall be designated by the Engineer. The Variable Message Signs shall be in operation at all times. In the event of damage or mechanical/electrical failure, the Contractor shall repair or replace the Variable Message Sign within 24 hours. The Department will not take delivery of the Variable message signs upon completion of the work.

BARRICADES

Barricades used in lieu of barrels and cones for channelization or delineation will be incidental to Maintain and Control Traffic according to Section 112.04.01. Barricades used to protect pavement removal areas will be bid as each according to Section 112.04.04. Individual barricades will be measured only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. Replacements for damaged barricades or barricades directed to be replaced by the Engineer due to poor condition or reflectivity will not be measured for payment.

PAVEMENT MARKINGS

Remove or cover the lenses of raised pavement markers that do not conform to the traffic control scheme in use, or as directed by the Engineer. Lenses shall be replaced or uncovered before a closed lane is reopened to traffic. No direct payment will be made for removing and replacing or covering and uncovering the lenses, but shall be incidental to "Maintain and Control Traffic". Do not remove raised pavement markers until immediately prior to Phase II. Replace pavement markings after permanent striping for lane lines is placed.

Temporary and permanent striping shall be in accordance with Section 112, except that:

(1) Temporary Striping shall be 6" in width; and
(2) If the contractor's operations or phasing requires temporary markings which must be subsequently removed from the ultimate pavement, an approved "Removable Lane Tape" shall be used; however removable lane tape will be measured and pad as Temporary striping painted line.
(3) Edge lines will be required for temporary striping; and
(4) Temporary or permanent striping shall be in place before a lane is opened to traffic; and
(5) Permanent striping shall be 6" paint..

TRAFFIC COORDINATOR

Designate an employee to be traffic coordinator. The Traffic Coordinator shall inspect the project maintenance of traffic once every two hours during the Contractor's operations and at any time a lane closure is in place. The Traffic Coordinator shall report all incidents throughout the work zone to the Engineer on the project. The Contractor shall furnish the name and telephone number where the Traffic Coordinator can be contacted at all times.

During any period when a lane closure is in place, the Traffic Coordinator shall arrange for personnel to be present on the project at all times to inspect the traffic control and to maintain the signing and devices. The personnel shall have access on the project to a radio or telephone to be used in case of emergencies or accidents.

COORDINATION OF WORK

The Contractor is advised that other projects may be in progress within or in the near vicinity of this project. The traffic control of those projects may affect this project and the traffic control of this project may affect those projects. The Contractor shall coordinate the work on this project with the work of the other contractors. In case of conflict, the Engineer will determine the relative priority to give to work phasing on the various projects.

PAVEMENT EDGE DROP-OFFS

Pavement edges that traffic is not expected to cross, except accidentally, shall be treated as follows:

Less than 2" - No protection required.

2" to 4" - Place plastic drums, vertical panels, or barricades every 50 feet. Cones may be used in place of plastic drums, panels, and barricades during daylight working hours. Wedge with asphalt mixture for leveling and wedging with a 1:1 or flatter slope in daylight hours, or 3:1 or flatter slope during nighttime hours, when work is not active in the drop-off area.

Greater than 4" - Protect with a lane or shoulder closure using drums or barricades; cones will not be allowed. If traffic is less than 10 feet from the excavated area, drum or barricade spacing shall not exceed 20 feet. Place Type III Barricades facing oncoming traffic at each drop off until all asphalt base courses are placed or the excavated areaw are filled. Place pavement and backfill excavated areas according to the phasing; if work is interrupted by inclement weather or for any other reason such that the new pavement cannot be placed on the same day the trench is excavated, protect any drop-offs within 10 feet of a travel lane with a DGA wedge or cuttings from trench with 3:1 or flatter slope; the wedge shall be removed and the new pavement placed as soon as the weather permits. In lieu of a wedge, small areas of 4 feet or less in their least dimension may be covered by a ¾ inch steel plate when work is not actively in progress at the pavement removal area; the plate shall be anchored to the pavement by any method approved by the Engineer that will prevent it being dislodged by accidental impact. While workers are present in excavated areas greater than 4 inches located less than 10 feet from traffic, protect work zone with a TMA.

Special Notes

for

Pulaski County
Nancy Toll Booths

Traffic Control Plan

Sheets 1 thru 5

TRAFFIC CONTROL PLAN
PULASKI COUNTY
FD04 100-9008-077-080

THIS PROJECT IS A FULLY CONTROLLED ACCESS HIGHWAY

TRAFFIC CONTROL GENERAL

Except as provided herein, traffic shall be maintained in accordance with the 2000 Standard Specifications and the Standard Drawings, current editions. Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price to "Maintain and Control Traffic".

Contrary to Section 106.01, traffic control devices used on this project may be new, or used in like new condition, at the beginning of the work and maintained in like new condition until completion of the work.

PROJECT PHASING & CONSTRUCTION PROCEDURES

Lane closures will not be allowed on the following days:

May 23 – 26, 2003	Memorial Day Weekend
July 3 – 7, 2003	Independence Day Weekend
August 29 – September 2, 2003	Labor Day Weekend
November 26 – 30, 2003	Thanksgiving
December 24 – 25, 2003	Christmas

The Engineer may designate additional days and hours when lane closures will not be allowed. Maintain a minimum of one traffic lane in each direction on ramps at all times during construction. The clear lane width shall be 10 feet. If traffic should be stopped due to construction operations, and a school bus or any emergency vehicle on an official run arrives on the scene, the Contractor shall make provisions for the passage of the vehicle as quickly as possible.

Phase I:

- The contractor shall have lane closures in place for the two median booth lanes on the ramps at the Nancy Interchange at 12:01 AM on May 1, 2003. The Department will remove exempt items not designated for removal by the Contractor. Allow 15 calendar days for this work.. Maintain lane closure during this period
- Remove Toll Plaza equipment. Remove canopy. Stop traffic in no more than 20 minute intervals to remove canopy.
- Remove traffic counting treadles.
- Lane closures shall be maintained and work shall continue 24 hours per day, 7 days per week until all the work is completed at this location as detailed in the Special Note for Toll Booth Removal and Replacement.
- Restripe painted lane and edge lines as directed by the Engineer.

LANE CLOSURES

Do not allow traffic on the milled surface; maintain lane closures during the interval between milling and resurfacing. Lane closures shall not be left in place during prohibited periods as specified in the Project Phasing. Only one lane closure in each direction of travel will be allowed.

SIGNS

Contrary to Section 112.04.02 and 112.04.03, Low Shoulder signs will not be measured for payment, but will be incidental to Maintain and Control Traffic. Contrary to section 112.04.02, only long term signs (signs intended to be continuously in place for more than 3 days) will be measured for payment; short term signs (signs intended to be left in place for 3 days or less) will not be measured for payment but will be incidental to Maintain and Control Traffic.

Individual signs will be measured only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. Replacements for damaged signs or signs directed to be replaced by the Engineer due to poor legibility or reflectivity will not be measured for payment. Contrary to section 112, short term signs (signs intended to be left in place for 3 days or less) will not be measured for payment but will be incidental to Maintain and Control Traffic.

VARIABLE MESSAGE SIGNS

The Contractor shall provide a minimum of two Variable Message Signs, one in advance of or on the project in each direction at locations to be determined by the Engineer. The locations designated may vary as the work progresses. The messages required to be provided shall be designated by the Engineer. The Variable Message Signs shall be in operation at all times. In the event of damage or mechanical/electrical failure, the Contractor shall repair or replace the Variable Message Sign within 24 hours. The Department will not take delivery of the Variable message signs upon completion of the work.

BARRICADES

Barricades used in lieu of barrels and cones for channelization or delineation will be incidental to Maintain and Control Traffic according to Section 112.04.01. Barricades used to protect pavement removal areas will be bid as each according to Section 112.04.04. Individual barricades will be measured only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. Replacements for damaged barricades or barricades directed to be replaced by the Engineer due to poor condition or reflectivity will not be measured for payment.

PAVEMENT MARKINGS

Remove or cover the lenses of raised pavement markers that do not conform to the traffic control scheme in use, or as directed by the Engineer. Lenses shall be replaced or uncovered before a closed lane is reopened to traffic. No direct payment will be made for removing and replacing or covering and uncovering the lenses, but shall be incidental to "Maintain and Control Traffic". Do not remove raised pavement markers until immediately prior to Phase II. Replace pavement markings after permanent striping for lane lines is placed.

Temporary and permanent striping shall be in accordance with Section 112, except that:

(1) Temporary Striping shall be 6" in width; and
(2) If the contractor's operations or phasing requires temporary markings which must be subsequently removed from the ultimate pavement, an approved "Removable Lane Tape" shall be used; however removable lane tape will be measured and pad as Temporary striping painted line.
(3) Edge lines will be required for temporary striping; and
(4) Temporary or permanent striping shall be in place before a lane is opened to traffic; and
(5) Permanent striping shall be 6" Paint.

TRAFFIC COORDINATOR

Designate an employee to be traffic coordinator. The Traffic Coordinator shall inspect the project maintenance of traffic once every two hours during the Contractor's operations and at any time a lane closure is in place. The Traffic Coordinator shall report all incidents throughout the work zone to the Engineer on the project. The Contractor shall furnish the name and telephone number where the Traffic Coordinator can be contacted at all times.

During any period when a lane closure is in place, the Traffic Coordinator shall arrange for personnel to be present on the project at all times to inspect the traffic control and to maintain the signing and devices. The personnel shall have access on the project to a radio or telephone to be used in case of emergencies or accidents.

COORDINATION OF WORK

The Contractor is advised that other projects may be in progress within or in the near vicinity of this project. The traffic control of those projects may affect this project and the traffic control of this project may affect those projects. The Contractor shall coordinate the work on this project with the work of the other contractors. In case of conflict, the Engineer will determine the relative priority to give to work phasing on the various projects.

PAVEMENT EDGE DROP-OFFS

Pavement edges that traffic is not expected to cross, except accidentally, shall be treated as follows:

Less than 2" - No protection required.

2" to 4" - Place plastic drums, vertical panels, or barricades every 50 feet. Cones may be used in place of plastic drums, panels, and barricades during daylight working hours. Wedge with asphalt mixture for leveling and wedging with a 1:1 or flatter slope in daylight hours, or 3:1 or flatter slope during nighttime hours, when work is not active in the drop-off area.

Greater than 4" - Protect with a lane or shoulder closure using drums or barricades; cones will not be allowed. If traffic is less than 10 feet from the excavated area, drum or barricade spacing shall not exceed 20 feet. Place Type III Barricades facing oncoming traffic at each drop off until all asphalt base courses are placed or the excavated areaw are filled. Place pavement and backfill excavated areas according to the phasing; if work is interrupted by inclement weather or for any other reason such that the new pavement cannot be placed on the same day the trench is excavated, protect any drop-offs within 10 feet of a travel lane with a DGA wedge

or cuttings from trench with 3:1 or flatter slope; the wedge shall be removed and the new pavement placed as soon as the weather permits. In lieu of a wedge, small areas of 4 feet or less in their least dimension may be covered by a ¾ inch steel plate when work is not actively in progress at the pavement removal area; the plate shall be anchored to the pavement by any method approved by the Engineer that will prevent it being dislodged by accidental impact. While workers are present in excavated areas greater than 4 inches located less than 10 feet from traffic, protect work zone with a TMA.

Special Notes & Drawings

for

Signing

COORDINATION OF WORK WITH OTHER CONTRACTS
FD04 003-0065-0042-045

The Contractor is advised this project is within the limits of an existing ongoing project. The Engineer will coordinate the work of the Contractors. See Section 105.06.

The I-65 signs to be refurbished by this project are scheduled to be removed under the ongoing project at a date that has not yet been determined. At the time of construction the Engineer will determine if the work under this contract will be accomplished as planned or if the work will be deleted from the contract. Do not order materials or supplies for this work until the Engineer makes a determination.

If the work is deleted , the e will be no adjustment in prices to items in other sections of the contract, and no claims will be considered for any expenses incurred or lost profit anticipated by the contractor.

Coordination.Contractors
8/13/2002

SIGNING
ESTIMATE OF QUANTITIES

ITEM	CODE NUMBER	UNIT	BON AYR TOLL PLAZA	US 68 & KY 80 TOLL PLAZA	US 127 TOLL PLAZA	I-65	KY 80 NANCY INTERCHANGE	TOTALS
			QUANTITY					
GROUND MOUNTED SIGN SUPPORTS								
(1) GALVANIZED STEEL TYPE B	6440	LBS.	——	560	560	——	1825	2945
FOOTINGS FOR SIGNS								
CONCRETE - CLASS "A"	6490	CU.YD.	——	1.86	1.86	——	3.26	6.98
SIGN BRIDGE ATTACHMENT BRACKETS	6448	EACH	——	2	2	——	——	4
SIGN BASE MATERIAL								
(2) ALUMINUM PANEL SIGNS	6405	SQ.FT.	——	361	525	——	183	1069
SHEETING SIGNS 0.080 GAUGE	6406	SQ.FT.	——	——	——	68	——	68
REMOVAL ITEMS								
(3) (4) REMOVE SIGN SUPPORT BEAMS	6451	EACH	21	32	32	——	12	85
(3) (5) REMOVE SIGN SUPPORT BRIDGE BRACKET		EACH	——	6	6	——	——	12

NOTES :

(1) QUANTITY SHALL INCLUDE ALL NECESSARY HARDWARE TO FORM COMPLETE BREAK-AWAY BEAM. PAYMENT FOR GROUND MOUNTED SIGN SUPPORTS SHALL BE BASED ON THE NOMINAL WEIGHT OF THE BEAMS. THE NECESSARY GALVANIZING, HARDWARE, ETC. IS TO BE CONSIDERED INCIDENTAL.

(2) QUANTITY SHALL INCLUDE ALL COPY AND HARDWARE NECESSARY TO FORM COMPLETE SIGN.

(3) ALL MATERALS REMOVED AND NOT REUSED, SUCH AS SIGNS, SIGN LIGHTS, SIGNS SUPPORTS, ETC. SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

(4) WHERE THE REMOVAL OF BEAM SIGN SUPPORTS IS CALLED FOR, THE BEAM AND ANY CONCRETE PROJECTING ABOVE THE GROUND LINE ARE TO BE CUT OFF A MINIMUM OF ONE FOOT BELOW EXISTING GROUND LINE OR THE ENTIRE BEAM AND CONCRETE BASE ARE TO BE REMOVED COMPLETELY AND BACKFILLED TO EXISTING GROUND LINE.

(5) REMOVE SIGN AND BRIDGE BRACKETS AND ANY CONDUIT, WIRING OR LIGHT FIXTURES.

CUMBERLAND PARKWAY

TOLL REMOVAL

TRAFFIC CONTROL PLAN
BARREN COUNTY
FD04 003-0065-042-045

THIS PROJECT IS A FULLY CONTROLLED ACCESS HIGHWAY

TRAFFIC CONTROL GENERAL

Except as provided herein, traffic shall be maintained in accordance with the 2000 Standard Specifications and the Standard Drawings, current editions. Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price to "Maintain and Control Traffic".

Contrary to Section 106.01, traffic control devices used on this project may be new, or used in like new condition, at the beginning of the work and maintained in like new condition until completion of the work.

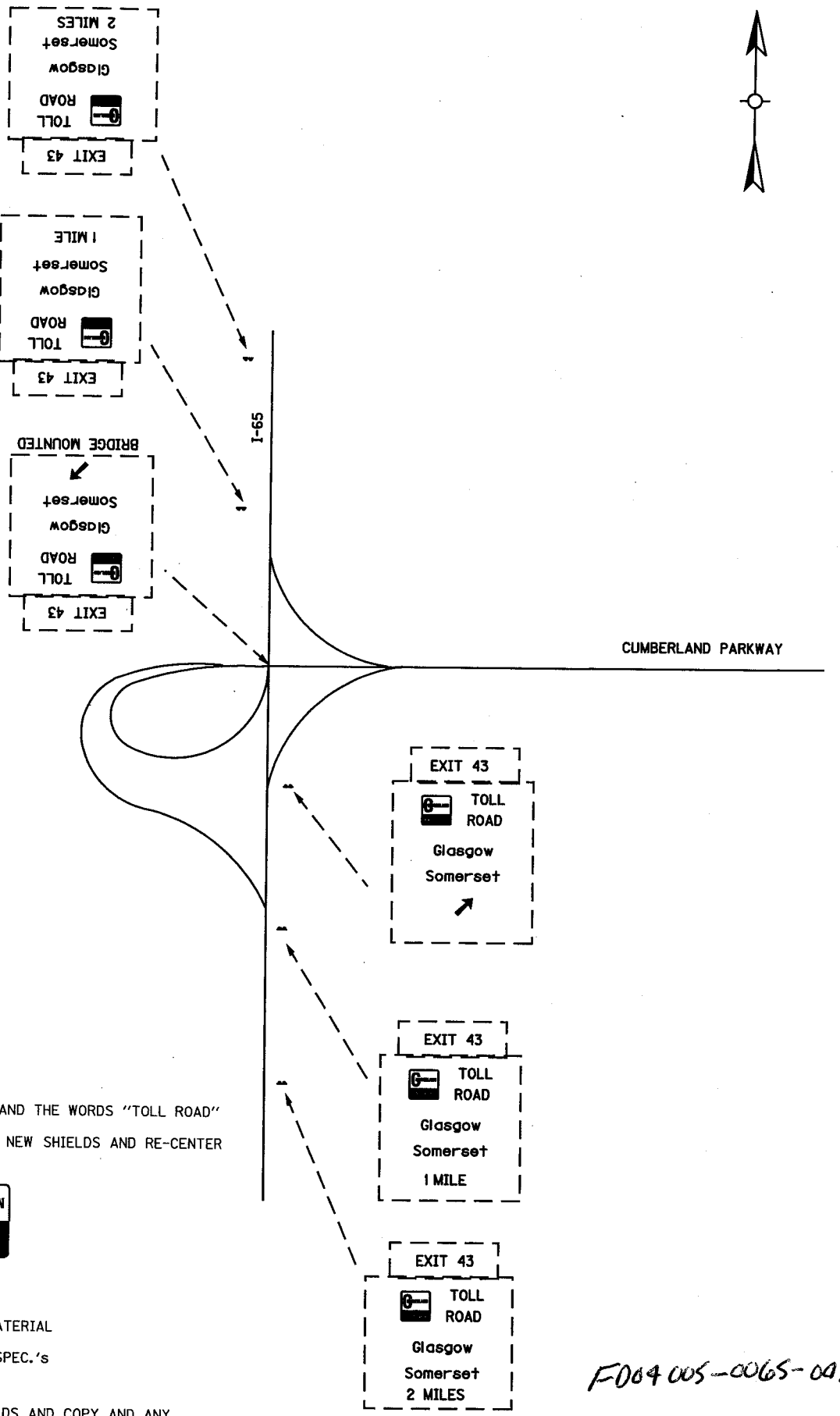
PROJECT PHASING & CONSTRUCTION PROCEDURES

No lane closures will be allowed. Protect work zones with a shoulder closure. The Engineer may designate days and hours when no work will be allowed.

SIGNS

Perform work under short term work zone signing. Contrary to section 112.04.02, short term signs (signs intended to be left in place for 3 days or less) will not be measured for payment but will be incidental to Maintain and Control Traffic.

Individual signs will be measured only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. Replacements for damaged signs or signs directed to be replaced by the Engineer due to poor legibility or reflectivity will not be measured for payment. Contrary to section 112, short term signs (signs intended to be left in place for 3 days or less) will not be measured for payment but will be incidental to Maintain and Control Traffic.



REMOVE THE EXISTING SHIELD AND THE WORDS "TOLL ROAD" FROM THE 6 SIGNS AND ATTACH NEW SHIELDS AND RE-CENTER

45" x 36"

USE .080 BASE MATERIAL

SEE DETAIL FOR SPEC.'s

THE COST FOR REMOVING SHIELDS AND COPY AND ANY HARDWARE REQUIRED TO ATTACH THE NEW SHIELDS SHALL BE INCLUDED IN .080 SIGN BASE MATERIAL.

F004005-0065-047-045

BARREN COUNTY

I-65 AND CUMBERLAND PARKWAY

INTERCHANGE

(1)

FD04 005-9028-002-00

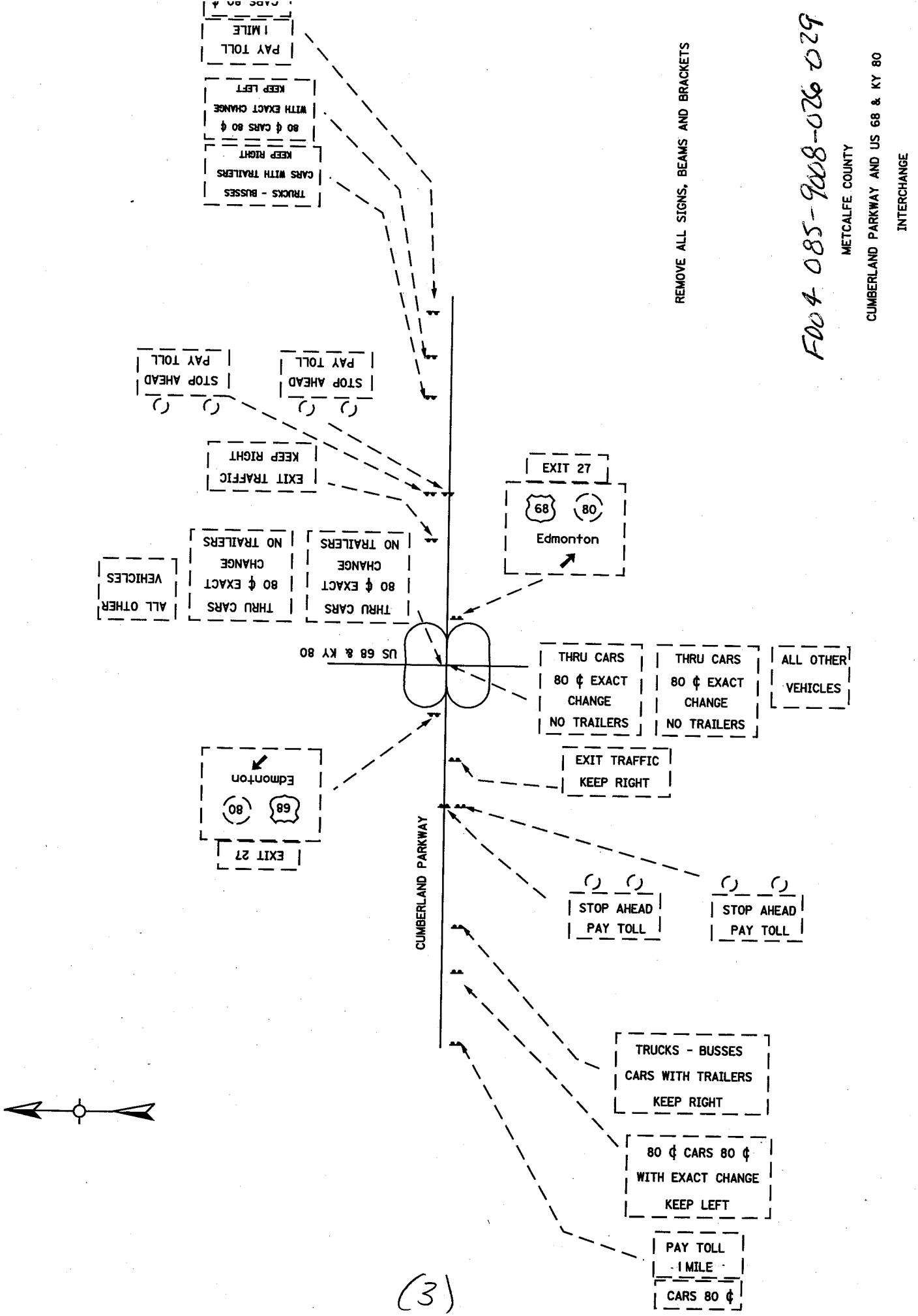
BARREN COUNTY

BON AYR TOLL PLAZA

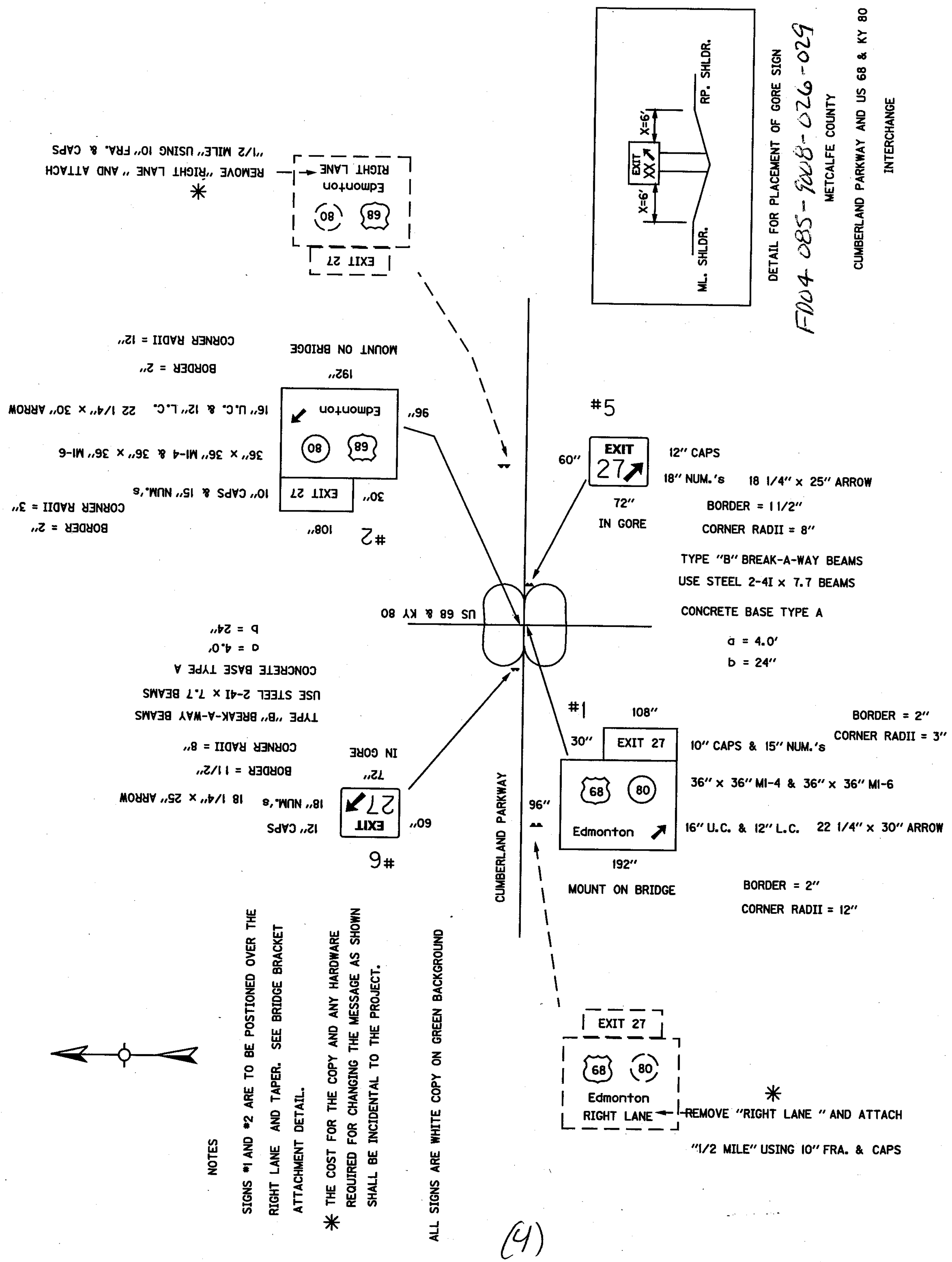
REMOVE ALL SIGNS AND BEAMS.

* THE COST FOR REMOVING SIGNS AND BRAKETS FROM THE CANOPY SHALL BE INCLUDED IN THE COST FOR REMOVING THE CANOPY.

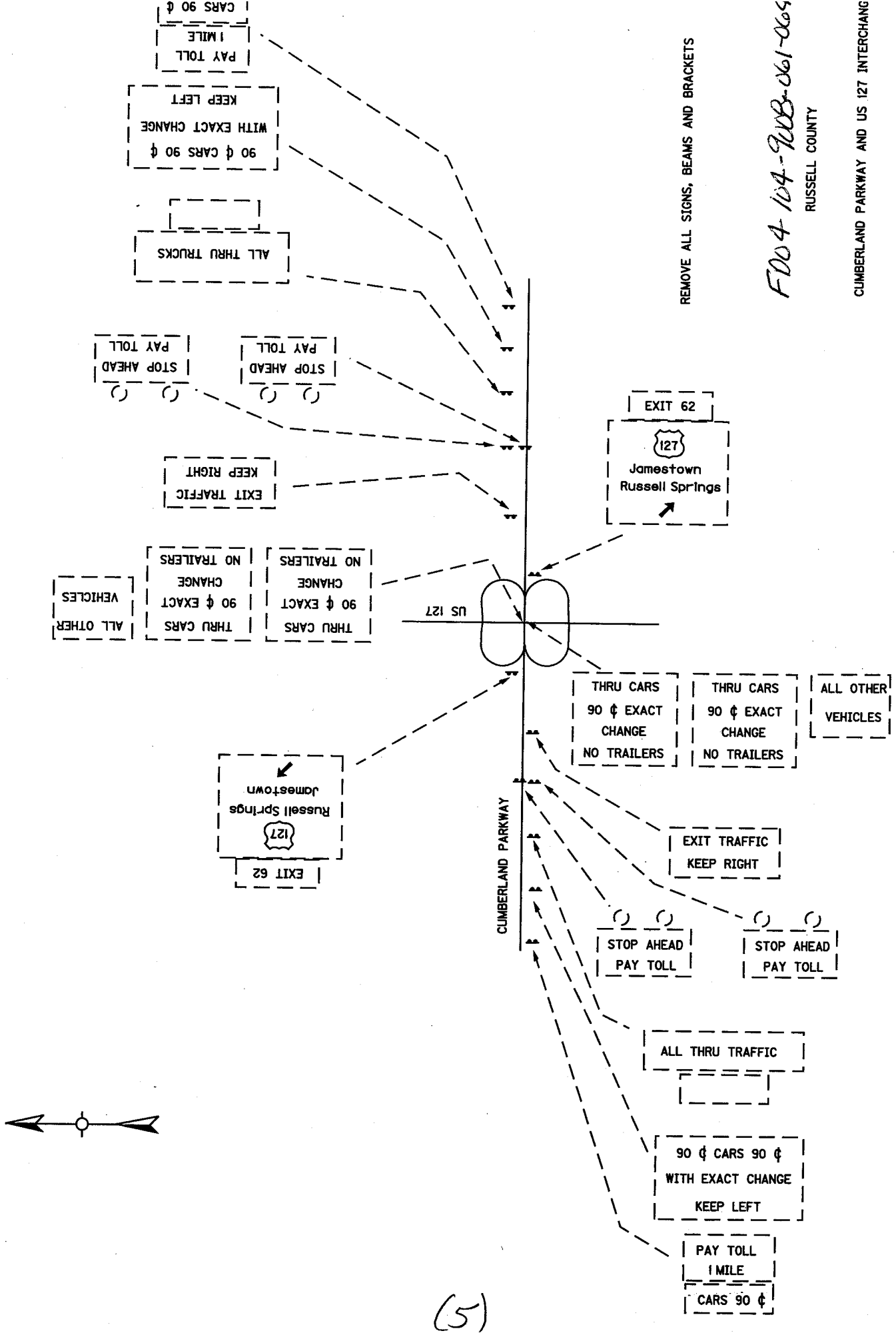
(2)


REMOVE ALL SIGNS, BEAMS AND BRACKETS
FD04 085-9008-026 029
METCALFE COUNTY
CUMBERLAND PARKWAY AND US 68 & KY 80
INTERCHANGE
CUMBERLAND PARKWAY
US 68 & KY 80
EXIT 27
68
80
Edmonton
THRU CARS
80 ¢ EXACT
CHANGE
NO TRAILERS
THRU CARS
80 ¢ EXACT
CHANGE
NO TRAILERS
ALL OTHER
VEHICLES
EXIT TRAFFIC
KEEP RIGHT
STOP AHEAD
PAY TOLL
STOP AHEAD
PAY TOLL
TRUCKS - BUSSES
CARS WITH TRAILERS
KEEP RIGHT
80 ¢ CARS 80 ¢
WITH EXACT CHANGE
KEEP LEFT
PAY TOLL
1 MILE
CARS 80 ¢

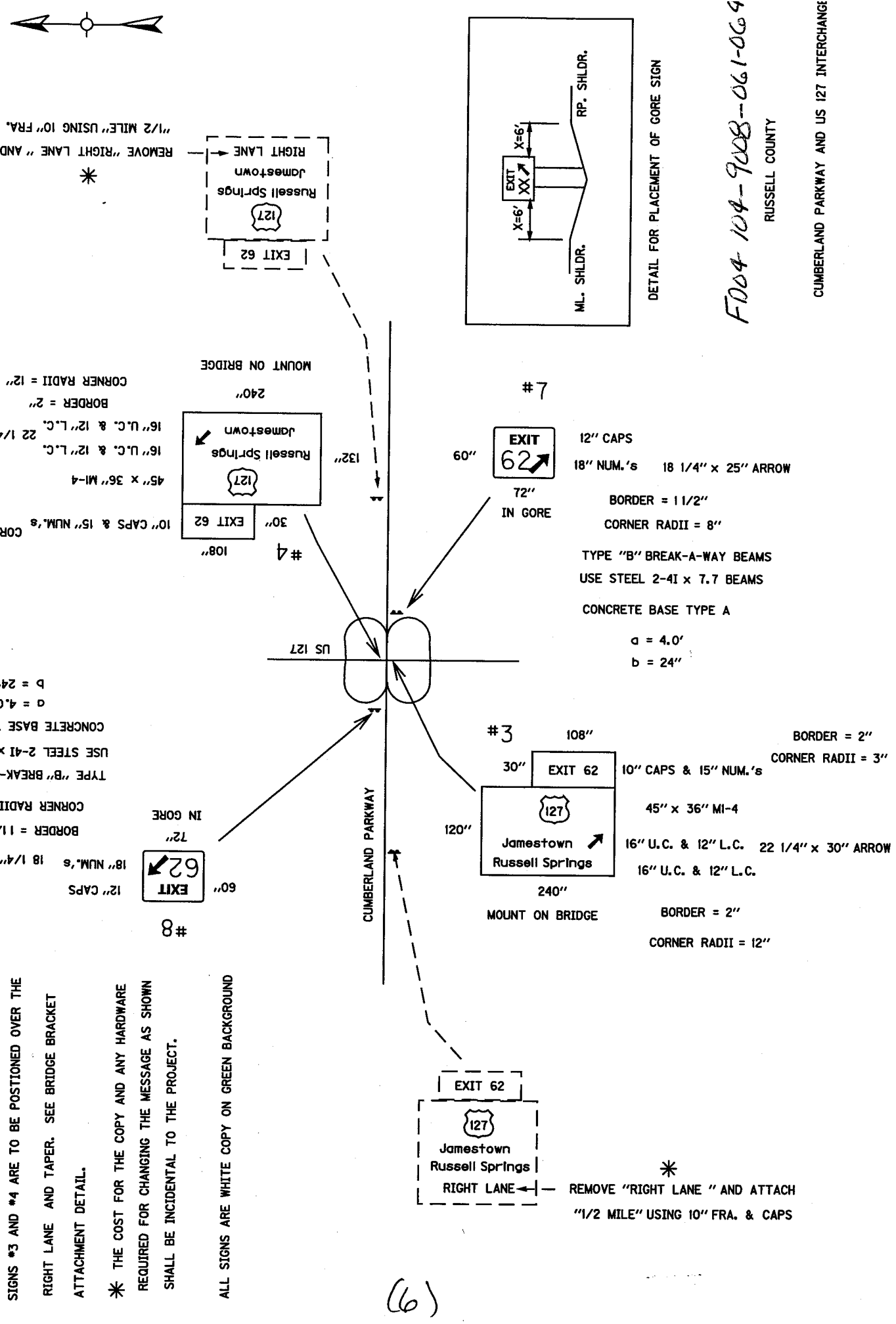
(3)



DETAIL FOR PLACEMENT OF GORE SIGN
FD04 085-9008-026-029
METCALFE COUNTY
CUMBERLAND PARKWAY AND US 68 & KY 80
INTERCHANGE
RP. SHLDR.
ML. SHLDR.
X=6'
EXIT XX
CUMBERLAND PARKWAY
US 68 & KY 80
#1
108"
30"
EXIT 27
10" CAPS & 15" NUM.'s
36" x 36" MI-4 & 36" x 36" MI-6
16" U.C. & 12" L.C. 22 1/4" x 30" ARROW
Edmonton
96"
192"
MOUNT ON BRIDGE
BORDER = 2"
CORNER RADII = 3"
BORDER = 2"
CORNER RADII = 12"
#5
EXIT 27
60"
72"
IN GORE
12" CAPS
18" NUM.'s
18 1/4" x 25" ARROW
BORDER = 1 1/2"
CORNER RADII = 8"
TYPE "B" BREAK-A-WAY BEAMS
USE STEEL 2-41 x 7.7 BEAMS
CONCRETE BASE TYPE A
a = 4.0'
b = 24"
#2
#6
EXIT 27
68 80
Edmonton
RIGHT LANE
REMOVE "RIGHT LANE " AND ATTACH "1/2 MILE" USING 10" FRA. & CAPS
NOTES
SIGNS #1 AND #2 ARE TO BE POSTIONED OVER THE RIGHT LANE AND TAPER. SEE BRIDGE BRACKET ATTACHMENT DETAIL.
* THE COST FOR THE COPY AND ANY HARDWARE REQUIRED FOR CHANGING THE MESSAGE AS SHOWN SHALL BE INCIDENTAL TO THE PROJECT.
ALL SIGNS ARE WHITE COPY ON GREEN BACKGROUND
(4)


REMOVE ALL SIGNS, BEAMS AND BRACKETS
FD04 164-1088-061-069
RUSSELL COUNTY
CUMBERLAND PARKWAY AND US 127 INTERCHANGE
US 127
CUMBERLAND PARKWAY
EXIT 62
127
Jamestown
Russell Springs
THRU CARS
90 ¢ EXACT
CHANGE
NO TRAILERS
THRU CARS
90 ¢ EXACT
CHANGE
NO TRAILERS
ALL OTHER
VEHICLES
EXIT TRAFFIC
KEEP RIGHT
STOP AHEAD
PAY TOLL
STOP AHEAD
PAY TOLL
ALL THRU TRAFFIC
90 ¢ CARS 90 ¢
WITH EXACT CHANGE
KEEP LEFT
PAY TOLL
1 MILE
CARS 90 ¢

(5)



NOTES

SIGNS #3 AND #4 ARE TO BE POSTIONED OVER THE RIGHT LANE AND TAPER. SEE BRIDGE BRACKET ATTACHMENT DETAIL.

* THE COST FOR THE COPY AND ANY HARDWARE REQUIRED FOR CHANGING THE MESSAGE AS SHOWN SHALL BE INCIDENTAL TO THE PROJECT.

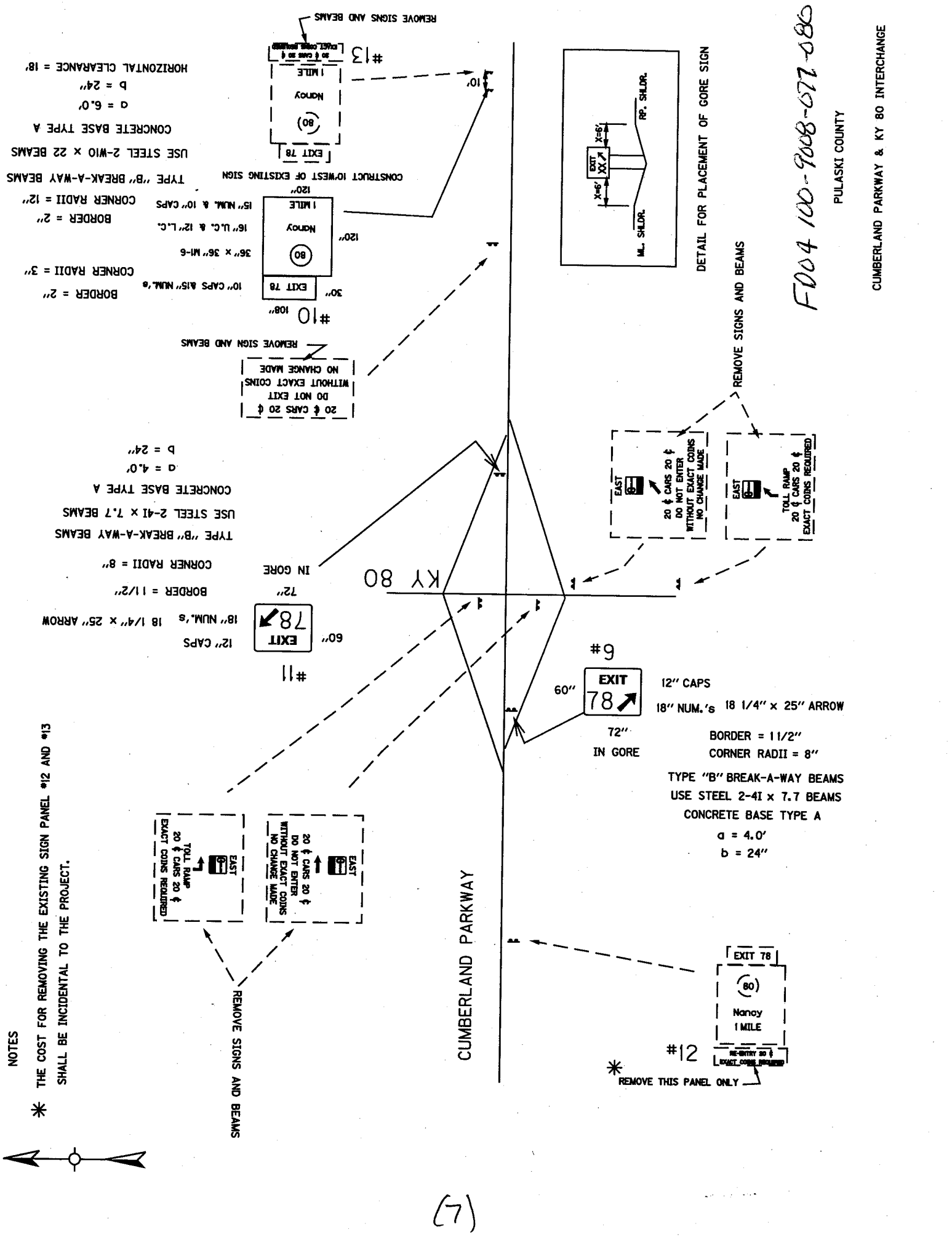
ALL SIGNS ARE WHITE COPY ON GREEN BACKGROUND

(6)

F004 100-9008-077-080

CUMBERLAND PARKWAY & KY 80 INTERCHANGE

PULASKI COUNTY



NOTES

* THE COST FOR REMOVING THE EXISTING SIGN PANEL #12 AND #13 SHALL BE INCIDENTAL TO THE PROJECT.

(7)

SIGNING SPECIFICATION NOTES

TO FURNISH, FABRICATE AND ERECT IN PLACE ALL MATERIALS NECESSARY TO FORM COMPLETED SIGNS AS INDICATED AT LOCATIONS DESCRIBED ELSEWHERE IN THESE PLANS.

GENERAL NOTES

PANEL SIGNS ARE TO BE FABRICATED FROM TWELVE INCH (12") WIDE ALUMINUM EXTRUSIONS AND, WHERE NOTED, COMPATIBLE SIX INCH (6") WIDE ALUMINUM EXTRUSIONS. WHEN A SIX INCH (6") EXTRUSION IS SPECIFIED, IT SHALL BE USED AS THE BOTTOM PANEL OF THE SIGN. TYPICAL CROSS-SECTIONS AND MINIMUM WEIGHTS PER FOOT ARE SHOWN ON THE MISCELLANEOUS DETAIL SHEET. COMPATIBLE SIDE EXTRUSIONS SHALL BE USED ON ALL SIGN EDGES. ALUMINUM MATERIAL FOR ALL EXTRUSIONS SHALL BE ALLOY 6063-T6 ASTM B221. ALL PORTIONS OF EXTRUSIONS WHICH ARE TO COMPOSE THE SIGN FACE SHALL BE PREPARED TO RECEIVE RETROREFLECTIVE BACKGROUND MATERIAL ACCORDING TO THE EXTRUSION AND RETROREFLECTIVE MATERIAL MANUFACTURER'S RECOMMENDATIONS. ALL REMAINING PORTIONS OF EXTRUSIONS (FRONT AND BACK) AND SIDE EXTRUSIONS ARE TO HAVE A SOFT MATTE FINISH.

PANEL SIGNS ARE TO BE FABRICATED FROM SIX INCH (6") WIDE, TWENTY (20) GAUGE STEEL PANELS. TYPICAL CROSS-SECTIONS ARE SHOWN ON THE MISCELLANEOUS DETAIL SHEET. PANELS ARE TO BE BOLTED TOGETHER EVERY TWO FEET (2') USING 3/8" DIAMETER BY 3/4" LONG FULLY THREADED HEX BOLTS, WITH CAREFUL ATTENTION TO ALIGNMENT OF PANEL FACES AND ENDS. THE FIRST SLOT IS TO BE SIX INCHES (6") FROM THE END. COMPATIBLE STEEL SIDE MOLDINGS OF THE SAME GAUGE AS THE PANEL SHALL BE USED ON ALL SIGN EDGES. MOLDINGS ARE TO BE FASTENED AT TOP AND BOTTOM WITH NON-CORROSIVE SCREWS AND ADDITIONALLY EQUALLY SPACED AS REQUIRED TO PROVIDE A MAXIMUM SPACING OF SIX FEET (6') BETWEEN SCREWS. STEEL FOR PANELS AND MOLDINGS SHALL CONFORM TO ASTM A-446, GRADE A.

PANEL, SIDE MOLDINGS AND SHEET SIGNS SHALL BE GALVANIZED AFTER COMPLETION OF ALL CUTTING, PUNCHING, AND DRILLING. THE GALVANIZING SHALL BE TWO (2) OUNCES PER SQUARE FOOT, EXTRA SMOOTH, MINIMUM SPANGLE, IN ACCORDANCE WITH ASTM A123 OR ASTM A525. PORTIONS OF PANELS AND STEEL SHEETS WHICH ARE TO RECEIVE RETROREFLECTIVE BACKGROUND MATERIAL SHALL BE COATED WITH A LIGHT, TIGHT, PHOSPHATE COATING OF 100 MILLIGRAMS PER SQUARE FOOT.

SIGNING SPECIFICATION NOTES

SIGN MATERIALS

BACKGROUND MATERIAL FOR SIGN FACES IS TO BE OF THE COLOR SPECIFIED AND VISUALLY IN ACCORDANCE WITH STANDARD INTERSTATE COLORS. THIS MATERIAL (EXCEPT BLACK PORTIONS) SHALL BE RETROREFLECTORIZED AND MUST MEET TYPE III CLASS "I" REQUIREMENTS OF SECTION 830 OF THE STANDARD SPECIFICATIONS.

ALL ATTACHMENTS OF REMOVABLE COPY TO SIGN FACES SHALL BE MADE WITH "POP" FASTENERS ("POP" RIVETS). "POP" RIVETS SHALL BE OF THE PROTRUDING HEAD TYPE. BOTH THE RIVET AND MANDREL SHALL BE CORROSION RESISTANT TO THE MATERIAL IN WHICH INSERTED. COPY SHALL BE AFFIXED WITH A MINIMUM SIZE OF 1/8 INCH DIAMETER "POP" FASTENER, LENGTH AS NECESSARY TO PROPERLY APPLY COPY IN A WORKMANLIKE MANNER. PANEL OVERLAY SECTIONS SHALL BE AFFIXED WITH A "POP" FASTENER WITH A MINIMUM DIAMETER 3/16 INCH, LENGTH AS NECESSARY TO PROPERLY APPLY THE OVERLAY IN A WORKMANLIKE MANNER. ALL RIVETS SHALL BE APPROVED BY THE ENGINEER PRIOR TO COMMENCING WORK ON THE PROJECT.

ROUTE MARKERS, FOR PANEL SIGN MOUNTING ONLY, ARE TO BE A RETROREFLECTORIZED WHITE CUT-OUT OF THE DISTINCTIVE U.S. SHIELD OR KY. ROUND SHAPE, OMITTING THE BLACK BACKGROUND OF THE STANDARD RECTANGULAR SHAPES. BORDERS ARE NOT TO BE USED ON THE CUT-OUT SHAPES AND THEIR DIMENSIONS ARE TO BE AS SHOWN IN THE INTERSTATE MANUAL. ROUTE MARKERS ARE TO BE SPACED EVENLY ACROSS THE PANEL SIGN FACE.

ROUTE MARKERS FOR PANEL SIGNS SHALL MEET THE REQUIREMENTS OF SECTION 830 OF THE STANDARD SPECIFICATIONS FOR TYPE III , CLASS "I", AND SHALL CONSIST OF RETROREFLECTIVE SHEETING HAVING AN INTEGRAL AIR CAVITY BETWEEN THE FRONT SURFACE AND THE OPTICAL ELEMENTS, MOUNTED ON AND FULLY COVERING ALUMINUM BASE COPY STOCK NOT OTHERWISE EMBOSSED OR CRIMPED, BUT HAVING A MINIMUM THICKNESS OF 0.080 INCHES.

HARDWARE:

ALL HARDWARE FOR THE ASSEMBLY OF PANEL SIGNS AND THE ATTACHMENT OF THESE SIGNS TO THEIR SUPPORTS SHALL BE AS RECOMMENDED BY THE PANEL MANUFACTURER. PLACEMENT OF POST CLIPS SHALL BE AS SHOWN ON THE MISCELLANEOUS DETAIL SHEET.

SIGNING SPECIFICATION NOTES

BEAMS:

ALL BEAMS SHALL BE EITHER TYPE "A" (STANDARD BEAM INSTALLATION) OR TYPE "B" (BREAK-A-WAY BEAM INSTALLATION). TYPE "A" BEAMS ARE SHOWN ON THE MISCELLANEOUS DETAIL SHEET AND TYPE "B" BEAMS ARE SHOWN ON THE BREAK-A-WAY BEAM DETAIL SHEET. THE TYPE AND SIZE OF BEAM TO BE USED SHALL BE INDICATED FOR EACH PANEL SIGN ON THE SIGN DETAIL SHEETS. BOTH TYPE "A" AND TYPE "B" BEAMS ARE TO BE EMBEDDED IN CONCRETE TO A DEPTH EQUAL TO THE DIMENSION "A" SHOWN FOR EACH SIGN ON THE DETAIL SHEETS.

TYPE "B" BEAMS:

SPECIFICATIONS FOR TYPE "B" BEAMS ARE LISTED ON THE BREAK-A-WAY BEAM DETAIL SHEET.

SIGNING SPECIFICATION NOTES

SAMPLES, TESTING, ETC.

BEFORE COMMENCING INSTALLATION, THE CONTRACTOR MUST FURNISH TO THE RESIDENT OR PROJECT ENGINEER FOR WRITTEN APPROVAL DRAWINGS, DESCRIPTION, MANUFACTURER'S CUTS, ETC. COVERING ALL MATERIALS TO BE USED. MILL TEST REPORTS FOR I-BEAMS, WIDE FLANGE BEAMS, ALUMINUM OR STEEL PANELS, AND EACH DIFFERENT GAGE OF ALUMINUM OR STEEL SHEETING USED MUST BE SUBMITTED TO THE DIVISION OF CONSTRUCTION AND APPROVED PRIOR TO ERECTION.

MISCELLANEOUS

RIGHT IS RESERVED TO INSPECT FABRICATION AND ERECTION WORK. AN INSPECTION (DAY AND NIGHT) WILL BE MADE AFTER COMPLETION OF INSTALLATION TO DETERMINE IF THE INTENT OF THE SPECIFICATIONS IS SATISFIED.

IF A MANUFACTURER'S WARRANTY IS FURNISHED TO THE CONTRACTOR ON ANY MATERIALS COVERED UNDER THESE SPECIFICATIONS, THE SAME WARRANTY SHALL BE FURNISHED TO THE STATE BY THE CONTRACTOR.

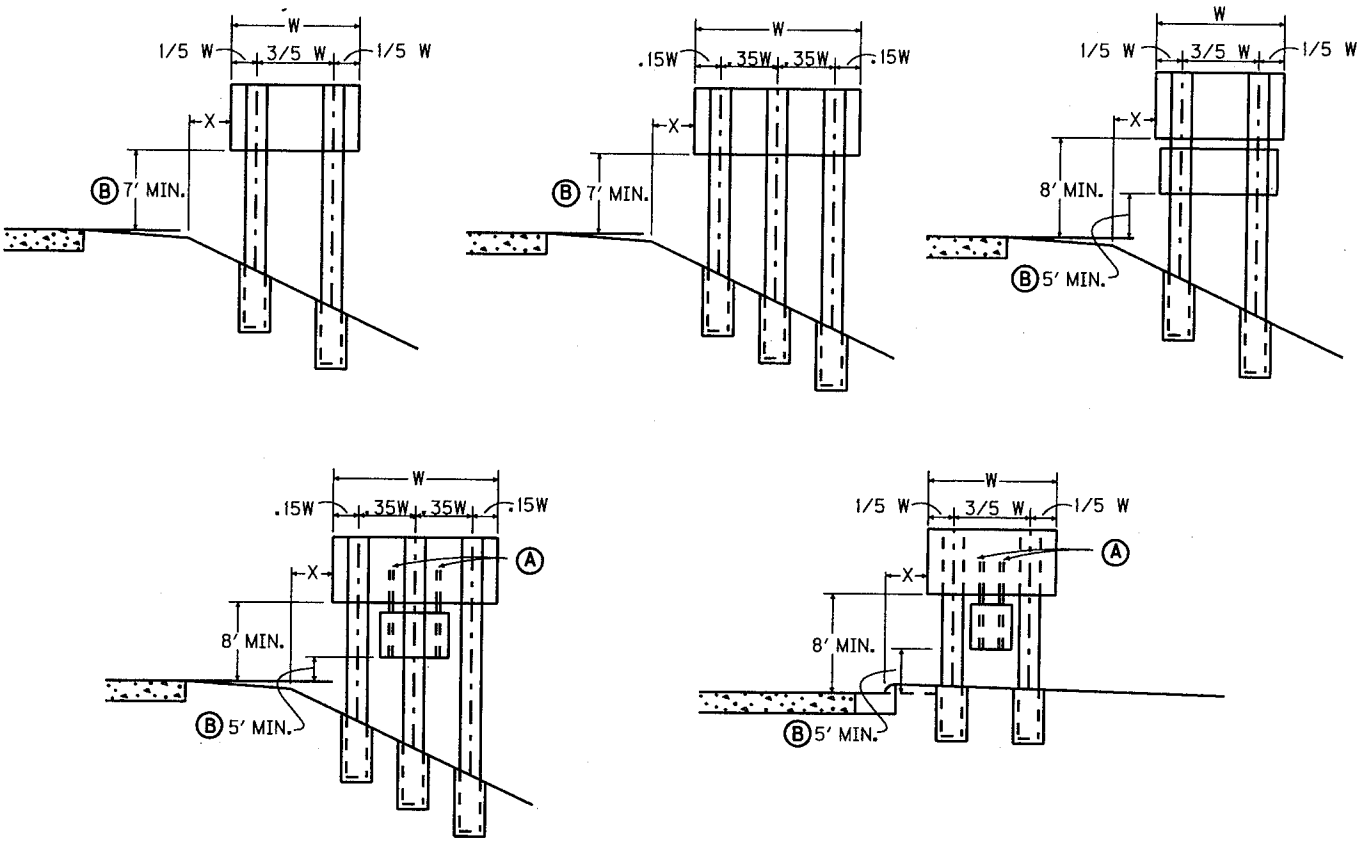
ALL SIGNS ARE TO BE LOCATED AT THE APPROXIMATE STATIONS LISTED AND THE EXACT LOCATION FOR EACH SIGN SHALL BE DETERMINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER; HOWEVER, IF ANY SIGN IS RELOCATED MORE THAN TWENTY-FIVE FEET (25') FROM THE STATION LISTED, THE NEW LOCATION MUST BE APPROVED BY THE DIVISION OF TRAFFIC.

CLEARING AND GRUBBING, WHEN REQUIRED FOR CONSTRUCTION OF THE SIGN PANELS, WILL BE INCIDENTAL TO THE CONTRACT AND NO DIRECT PAYMENT WILL BE ALLOWED.

ANY AREAS DISTURBED BY REMOVING EXISTING SIGNS OR CONSTRUCTING NEW SIGNS, THE AREAS MUST BE SIDE GRADED TO THE EXISTING SLOPES AND RESEEDED AS DIRECTED BY THE ENGINEER.

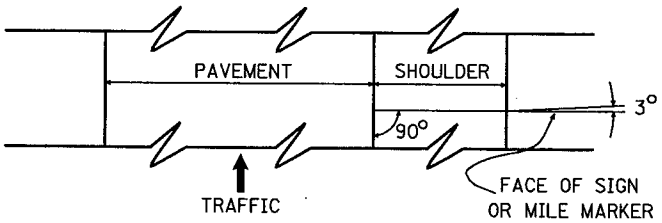
POSITIONING DETAIL SHEET

PANEL SIGNS



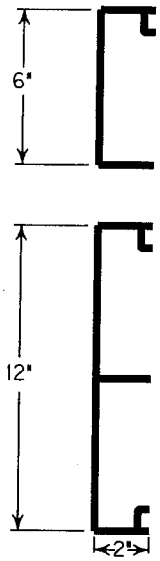
Ⓐ ATTACHMENT OF SECONDARY SIGN TO MAJOR SIGN IS TO BE MADE WITH TWO (2) 3" X 3" X 3/16" ANGLES OF SUFFICIENT LENGTH TO EXTEND FROM THE LOWER EDGE OF THE SECONDARY SIGN TO AT LEAST THREE FEET UP THE BACK OF THE MAJOR SIGN. A MINIMUM OF ONE POST CLIP PER FOOT SHALL BE USED IN ATTACHING EXTRUSIONS TO EACH ANGLE.

Ⓑ SHORTEST SUPPORTING MEMBER OF BREAK-A-WAY TYPE SIGNS SHALL BE NO LESS THAN 7' FROM THE BOTTOM OF THE SIGN TO THE GROUND.



MISCELLANEOUS DETAIL SHEET

PANEL DETAILS



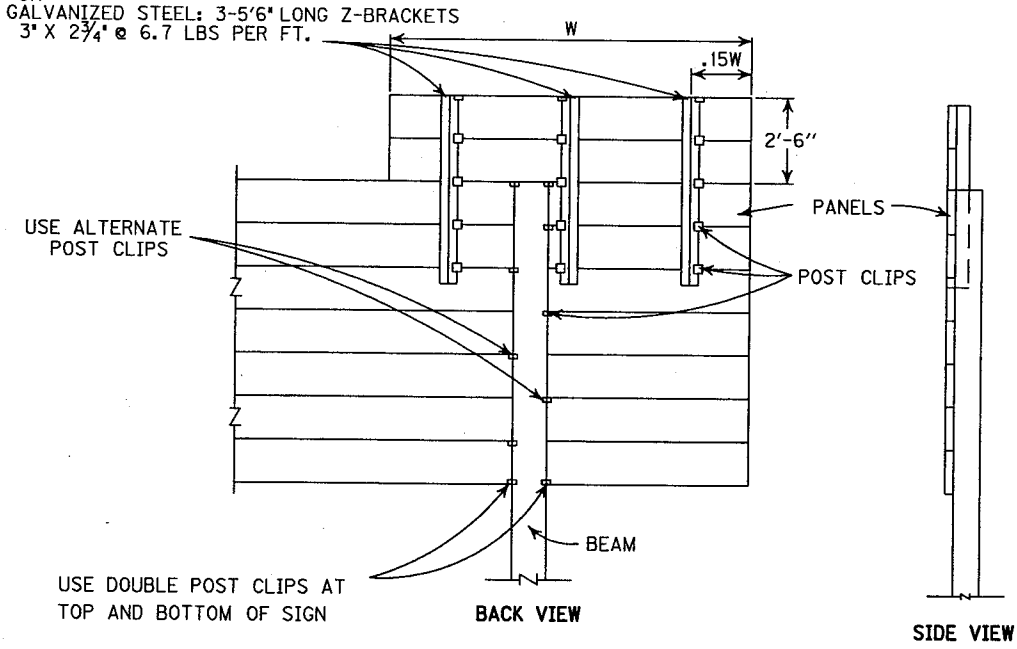
MINIMUM WEIGHT PER LINEAR FOOT

6" PANEL - 1.115 LBS.
12" PANEL - 2.485 LBS.

TYPICAL SECTIONS
ALUMINUM SIGN PANEL EXTRUSIONS

DETAIL FOR EXIT NUMBER SIGN ATTACHMENT AND TYPICAL POST CLIP ARRANGEMENT

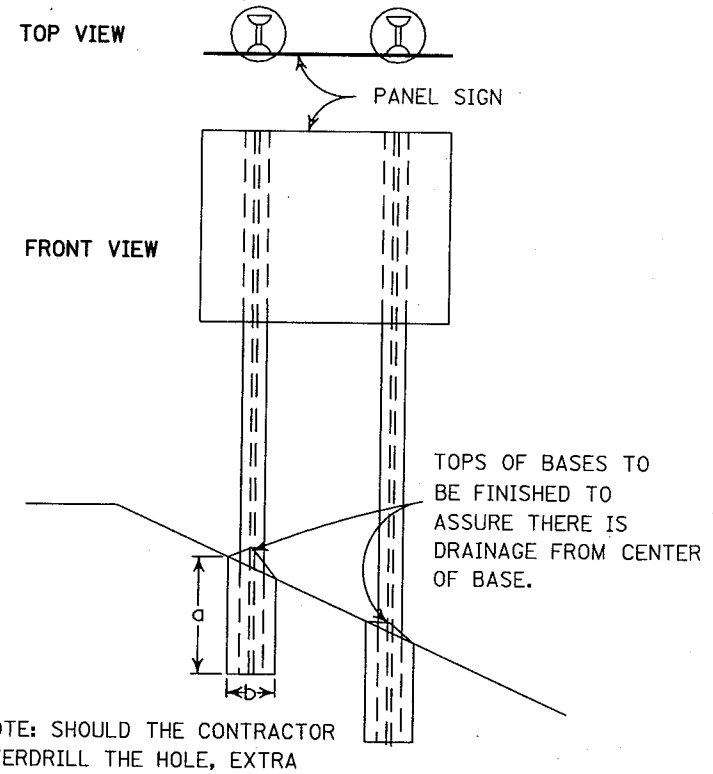
ALUMINUM: 3-5'6" LONG Z-BRACKETS
3" X $2\frac{11}{16}$" @ 2.33 LBS. PER FT.
OR
GALVANIZED STEEL: 3-5'6" LONG Z-BRACKETS
3" X $2\frac{3}{4}$" @ 6.7 LBS PER FT.



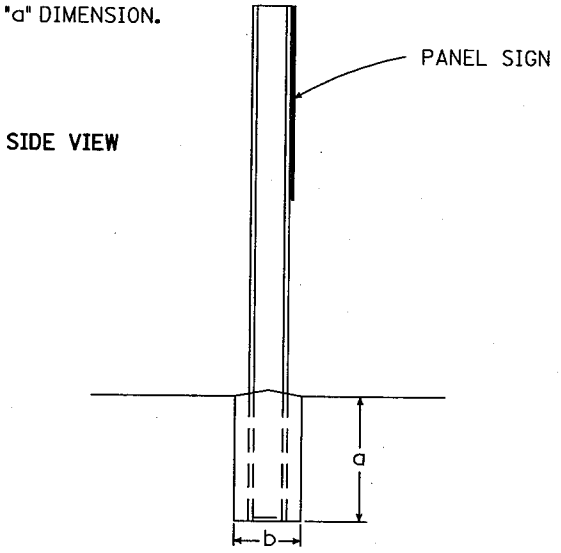
NOTE: THE COST FOR ATTACHING EXIT NUMBER SIGN SHALL BE INCLUDED IN THE BID ITEM FOR SIGN BASE MATERIAL FOR PANEL SIGNS AND SHALL INCLUDE ALL Z-BRACKETS AND HARDWARE. THE EXIT NUMBER SIGN SHALL BE CENTERED OVER THE LEFT OR RIGHT SIDE OF SIGN AS SHOWN ON THE PLANS.

MISCELLANEOUS DETAIL SHEET

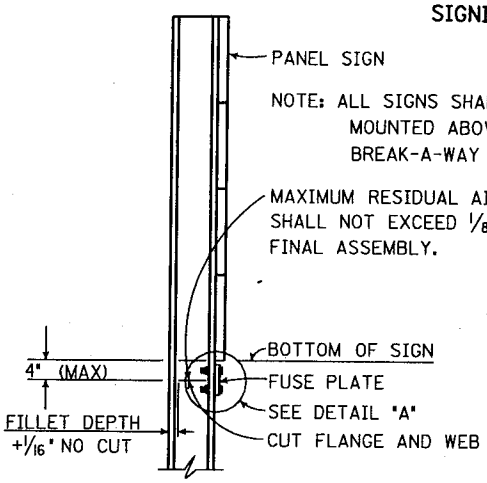
TYPICAL BEAM WITH TYPE "A" CONCRETE BASE DETAIL



NOTE: SHOULD THE CONTRACTOR OVERDRILL THE HOLE, EXTRA CONCRETE WILL BE AT THE CONTRACTOR'S EXPENSE. PAYMENT WILL BE DETERMINED BY THE "a" DIMENSION.

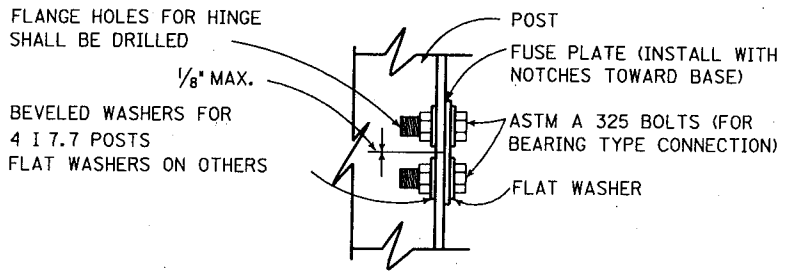


SIGNING BREAK-A-WAY BEAM DETAIL SHEET



TYPICAL SIDE VIEW

NOTE: CUT SURFACE WILL NOT BE TREATED UNTIL PLATE IS INSTALLED AND ALL BOLTS FULLY TIGHTENED. POST SHALL BE SAW CUT AFTER GALVANIZING AND THE CUT SURFACE TREATED WITH AN APPROVED ZINC SOLDER.

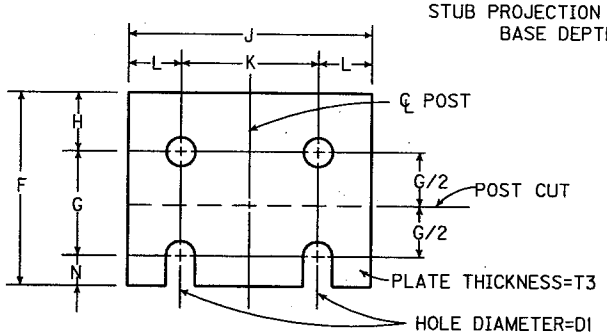


DETAIL "A" HINGE

FABRICATOR NOTE: ALL FRICTION FUSE PLATE BOLTS SHALL BE TIGHTENED IN THE SHOP FOLLOWING A METHOD APPROVED BY THE ENGINEER. TIGHTENING SHALL BE TO SUCH A DEGREE AS TO OBTAIN THE FOLLOWING RESIDUAL TENSION IN EACH BOLT.

BOLT SIZE	MINIMUM RESIDUAL TENSION
1/2" DIA.	12050 LBS.
5/8" DIA.	19200 LBS.
3/4" DIA.	28400 LBS.
7/8" DIA.	36050 LBS.

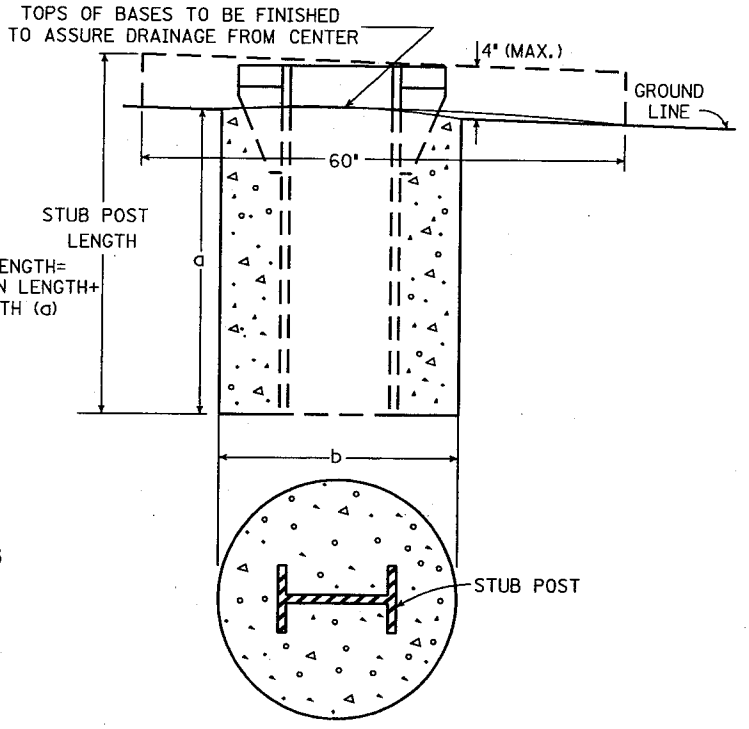
NO CUT DIMENSIONS	
BEAM	FILLET DEPTH +1/16"
W8X18	13/16"
W8X21	7/8"
W10X22	13/16"
W10X26	15/16"
W12X26	15/16"



NOTE: SEE TABLE FOR DIMENSIONS AND WEIGHT

FUSE PLATE DETAIL

NOTE: USE H.S. BOLTS WITH HEX. HD & HEX. NUT, ONE FLAT WASHER UNDER EACH BOLT HEAD AND BEVELED OR FLAT WASHER (WHERE REQUIRED) UNDER NUT.



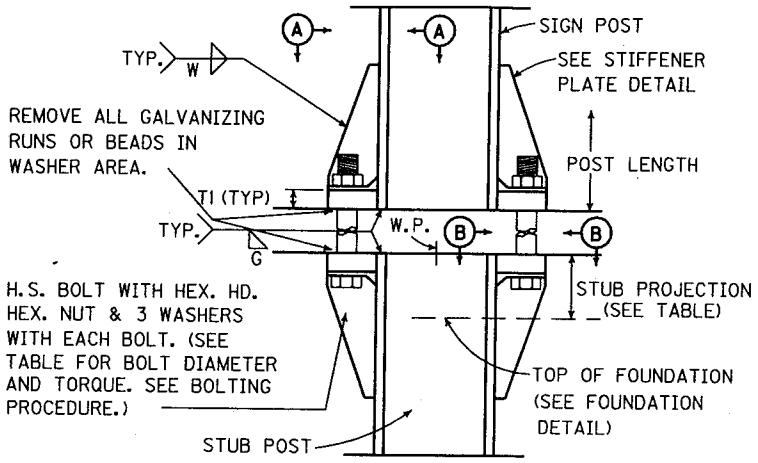
FOUNDATION DETAIL

DIMENSIONS * POST SIZE	BASE CONNECTION DATA TABLE									
	BOLT SIZE & TORQUE	A	B	C	D	E	T1	T2	W	R
W8X18	SEE TABLE ①	5	2	1 1/4	2 3/4	1 1/8	3/4	1/2	1/4	11/32
W8X21		6	2 1/2	1 3/8	3 1/2	1 1/4	1	3/4	5/16	13/32
W10X22										
W10X26										
W12X26										
4I 7.7		SEE DETAIL								

FUSE PLATE DATA TABLE											
F	G	H	J	K	L	N	D1	T3	BOLT DIA.	WT. OF EACH FUSE PL.
4 1/2	2 1/2	1 1/4	5 1/4	2 3/4	1 1/4	3/4	13/16	1/2	3/4	3.27 #
4 7/8	2 1/2	1 1/2	5 1/4	2 3/4	1 1/4	7/8	15/16	1/2	7/8	3.93 #
5 3/8	3	1 1/2	5 3/4	2 3/4	1 1/2	7/8	15/16	1/2	7/8	4.75 #
5 3/8	3	1 1/2	5 3/4	2 3/4	1 1/2	7/8	15/16	1/2	7/8	4.79 #
5 3/8	3	1 1/2	6 1/2	3 1/2	1 1/2	7/8	15/16	1/2	7/8	5.42 #
3 1/8	1 1/2	1 1/8	2 5/8	1 1/2	9/16	1/2	9/16	1/4	1/2	0.64 #

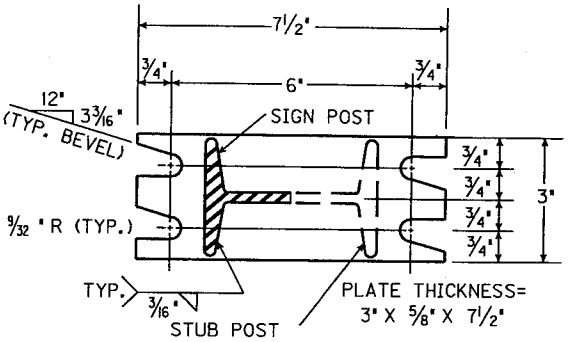
FOUNDATION DATA TABLE		
STUB PROJ.	a	b
3	FOR a & b DIMENSIONS SEE SIGN DETAIL SHEET	
2 1/2		
2 1/2		
2 1/2		
2 1/2		
3 1/2		

* ALL DIMENSIONS SHOWN ARE IN INCHES UNLESS OTHERWISE NOTED



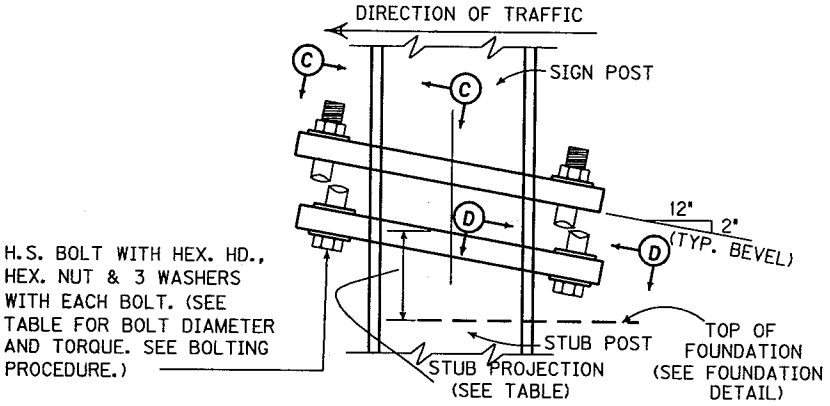
SIGN POST AND STUB POST ELEVATION

(FOR WF SHAPE)



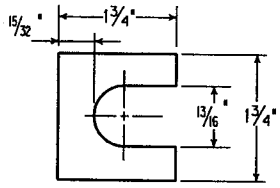
SECTION C-C SECTION D-D

SECTIONS SHOWN ARE FOR INSTALLATIONS ON RIGHT SHOULDER AND IN GORE. FOR INSTALLATIONS ON LEFT SHOULDER, PLATE AND SLOT BEVELS ARE OPPOSITE HAND.



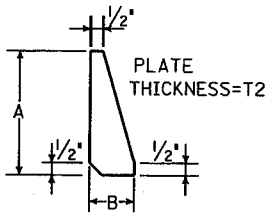
SIGN POST AND STUB POST ELEVATION

(FOR 4 I 7.7 SHAPES)



FURNISH 2-.012" THICK AND 2-.032"± THICK SHIMS PER POST. SHIMS SHALL BE FABRICATED FROM BRASS SHIM STOCK OR STRIP CONFORMING TO ASTM-B36.

SHIM DETAIL



STIFFENER PLATE DETAIL

(SEE TABLE FOR DIMENSIONS)

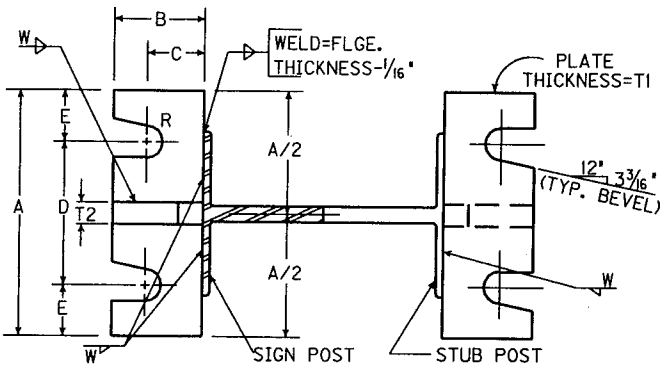
TABLE ①

SLIP BASE BOLT SIZES AND TORQUE VALUES			
POST SIZE (LBS./FT.)	SLIP BASE BOLT DIA. X LENGTH (INCHES)	CLAMPING FORCE (LBS.)	SLIP BASE TORQUE (LBS.-IN.)
1 - 8	1/2 X 2 1/2	920 - 1380	95 - 142
9 - 20	5/8 X 2 3/4	1740 - 2660	226 - 345
21 - 30	3/4 X 3 1/2	2400 - 3600	369 - 554

REQUIREMENTS OF ASTM A 123.

NOTE: TIGHTEN THE HIGH STRENGTH BOLTS IN THE BASE PLATE CONNECTION ONLY TO THE TORQUE SHOWN IN THE TABLE. (DO NOT OVER TIGHTEN)

7' FROM BOTTOM OF SIGN TO THE GROUND.



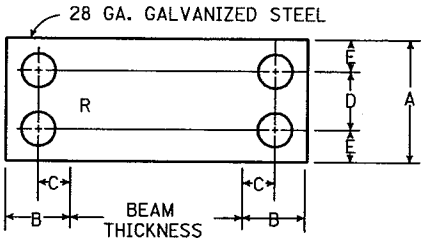
SECTION A-A SECTION B-B

(SEE TABLE FOR DIMENSIONS)

SECTIONS SHOWN ARE FOR INSTALLATIONS ON RIGHT SHOULDER AND IN GORE. FOR INSTALLATIONS ON LEFT SHOULDER, PLATE AND SLOT BEVELS ARE OPPOSITE HAND.

PROCEDURE FOR ASSEMBLY OF BASE CONNECTION

1. ASSEMBLE POST TO STUB WITH BOLTS AND WITH ONE FLAT WASHER ON EACH BOLT BETWEEN PLATES.
2. SHIM AS REQUIRED TO PLUM POST.
3. TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE WITH 12 TO 15 INCH WRENCH TO BED WASHERS AND SHIMS AND TO CLEAN BOLT THREADS, THEN LOOSEN EACH BOLT IN TURN AND RETIGHTEN IN A SYSTEMATIC ORDER TO THE PRESCRIBED TORQUE. (SEE TABLE)
4. BURR THREADS AT JUNCTION WITH NUT USING A CENTER PUNCH TO PREVENT NUT LOOSENING.



BOLT RETAINER FOR BASE CONNECTION

(SEE TABLE FOR DIMENSIONS)

GENERAL NOTES

BREAK-A-WAY SIGN POSTS SHALL BE FABRICATED FROM STRUCTURAL STEEL CONFORMING TO THE REQUIREMENTS OF ASTM A 441. ASTM A 572 GRADE 50 OR ASTM A 588 MAY BE SUBSTITUTED FOR A 441 AT THE OPTION OF THE CONTRACTOR. BASE PLATES FOR THE BREAK-A-WAY CONNECTIONS AND FRICTION FUSE PLATES AND BACKPLATES FOR THE POST HINGE ASSEMBLY SHALL BE FABRICATED FROM THE SAME TYPE STRUCTURAL STEEL SELECTED FOR THE SIGN POSTS. ALL HIGH STRENGTH BOLTS, NUTS AND WASHERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A 325. BOLTS OTHER THAN HIGH STRENGTH BOLTS SHALL CONFORM TO REQUIREMENTS OF ASTM A 307 CLASS A.

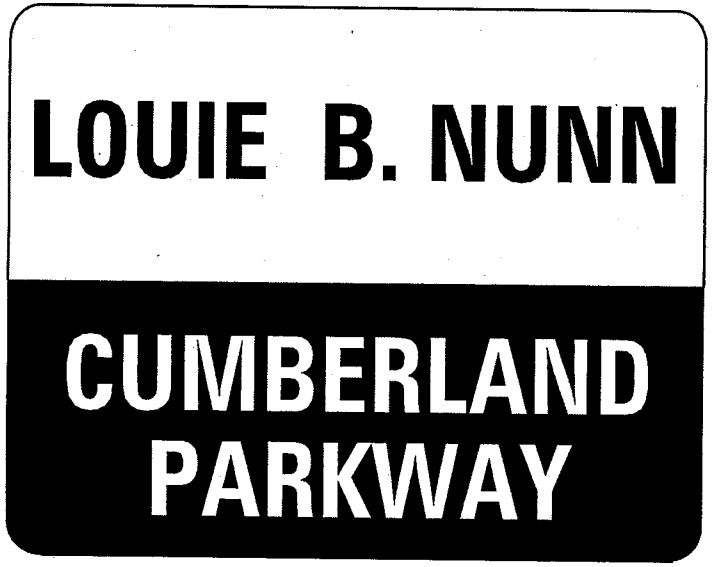
POSTS AND PLATES SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A 123.

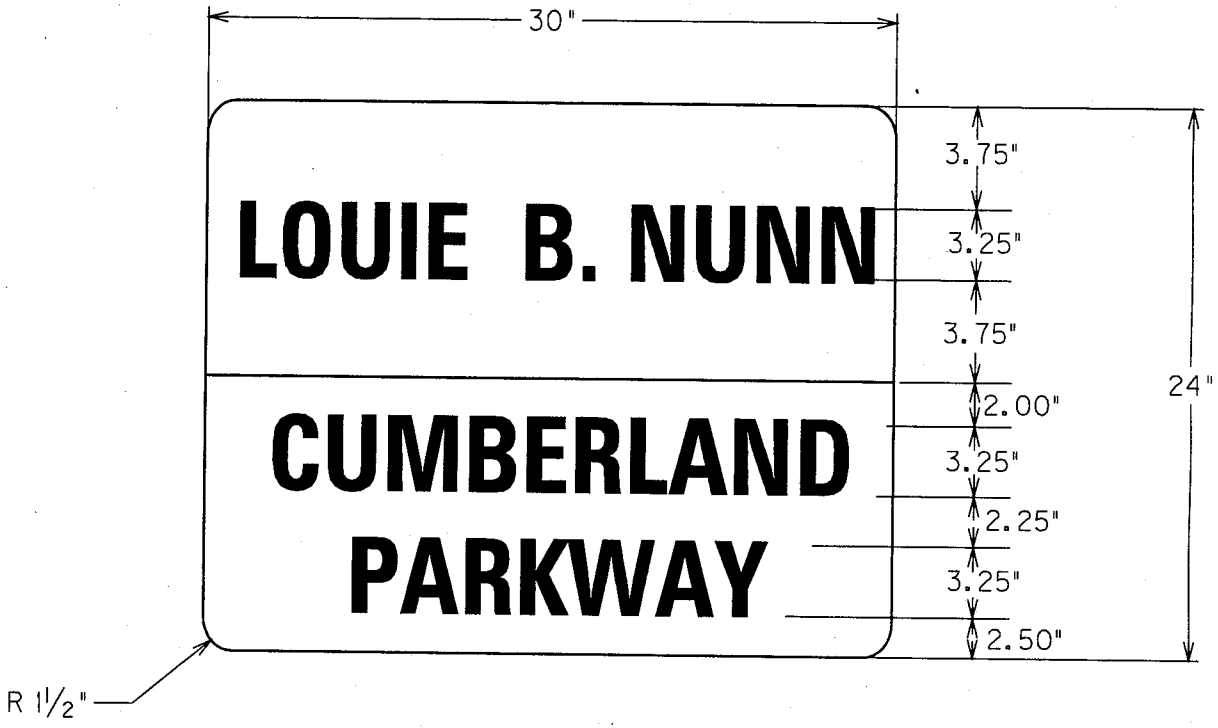
ALL STRUCTURAL STEEL BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AS ASTM A 153.

STRUCTURAL STEEL SHALL BE GALVANIZED AFTER FABRICATION EXCEPT AS NOTED.

SHOULD CONTRACTOR OVER DRILL HOLE FOR THE BASE, EXTRA CONCRETE WILL BE AT THE EXPENSE OF THE CONTRACTOR. PAYMENT WILL BE DETERMINED BY THE 'a' DIMENSION.

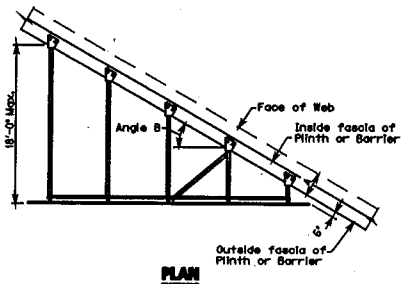
SHORTEST SUPPORTING MEMBER OF BREAK-A-WAY TYPE BEAMS SHALL MEASURE A MINIMUM OF 7' FROM BOTTOM OF SIGN TO THE GROUND.





THE WORDS "LOUIE B NUNN" ARE TO BE INTERSTATE BLUE WITH WHITE BACKGROUND.
THE WORDS "CUMBERLAND & PARKWAY" ARE TO BE WHITE WITH
INTERSTATE BLUE BACKGROUND. DIMENSIONS ARE TO BE INCREASED 50% FOR 45" X 36".
THIS SHIELD SHALL BE USED TO REPLACE THE "CUMBERLAND PARKWAY" SHIELDS SHOWN ON THE PLANS. ALL LETTERS AND BACKGROUND ARE TO BE REFLECTORIZED.

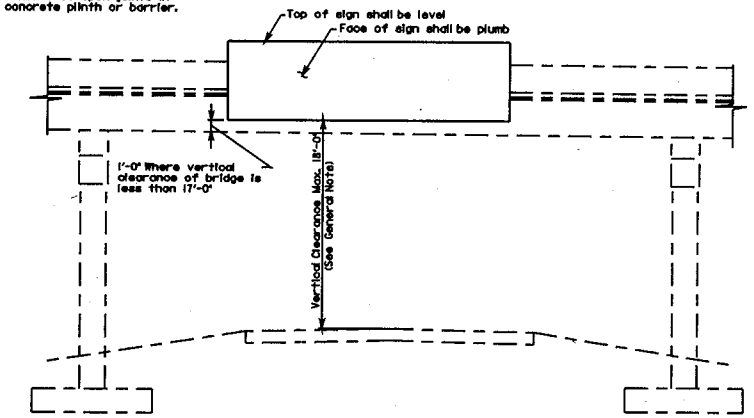
FOR INFORMATION ONLY



PLAN

Left skew as shown
Right skew opposite hand

The entire sign support may be move so as to clear handrail posts and no bracket shall be within 6" of open joints in concrete plinth or barrier.



ELEVATION OF BRIDGE AND SIGN

GENERAL NOTES

SPECIFICATIONS: The Kentucky Deparment of Highways Standard Specification for Road and Bridge Construction, current edition shall apply to this project.

DESIGN LOAD: Designed for 80 MPH wind in accordance with the specifications for the design and construction of structural steel supports for highway signs published by AASHTO, 1968.

ELEVATION OF SIGN: After establishing the horizontal location of the sign, the vertical elevation shall be established as follows: Determine the vertical clearance under the bridge within the limits of the sign. The vertical clearance of the sign shall be equal to this bridge vertical clearance plus 1'-0" with a maximum of 18'-0". This 18'-0" may be exceeded where top of the sign would be less than 0'-6" above the plinth or barrier.

FABRICATION: All metal components of the bracket shall be hot-dip galvanized after all fabrication has be completed. The galvanized material shall be loaded, hauled and handled in such a manner that the galvanizing will not be damaged. All abraded and damaged surfaces including the field holes in the T shape shall be regalvanized or repaired by painting with two coats of zinc oxide, zinc dust paint conforming to the requirements of Federal Specifications MIL-P15145. The paint is to be properly compounded in a suitable vehicle in the ratio of one part zinc oxide to four parts zinc dust, by weight. All repairs are to be as directed by the engineer.

MILL TEST REPORTS: Notarized test reports in triplicate shall be furnished The Department of Highways, stated that the material used comform to the specifications.

WELDING: All welding and welding materials shall conform to the specifications for Welded Highway and Railroad Bridges of The American Welding Society, current edition.

NON-SHRINKING GROUT: Specifications for non-shrinking grout shall be in accordance with the product manufactured as Embeco, Porrok or appoved equal.

MATERIALS: All structural steel furnished shall comform to ASTM Specifiation A36, current edition and shall be galvanized in accordance with ASTM A123, current edition. All pipes furnished shall conform to ASTM Specifications A53, current edition and shall be galvanized in accordanced with ASTM A123, current edition.

Sign brackets shall be placed on 4'-0" max. centers with 2'-0" max. sign overhang. The following is the required number for each side.	
Sign Length	Number of Brackets
0'-0" thru 8'-0"	2
8'-1" thru 12'-0"	3
12'-1" thru 16'-0"	4
16'-1" thru 20'-0"	5
20'-1" thru 24'-0"	6
24'-1" thru 28'-0"	7

INFORMATION FOR SIGNS NUMBER 1 & 2							
PRESTRESSED CONCRETE I BEAM							
K	L	M	N	≅O	≅P	Q	R
54"	26'-0"	25'-3"	26'-0"	10"	10"	2"	3"

NOTE:

CONTACT DIVISION OF BRIDGE DESIGN FOR FULL SIZE SHEETS. LOCATION OF BRACKET MUST BE REVIEWED BY THE DIVISION OF BRIDGE DESIGN.

ROAD UNDER BRIDGE	OVERHEAD ROAD	STATION OF ROAD UNDER	SIGN NO.	SIGN LENGTH L.	SIGN LENGTH H.	DIRECTION OF TRAFFIC FACING SIGN	LANE THAT SIGN WILL BE OVER	DIMENSION A	BEAM WEB T.	TYPE OF FASCIA	TYPE OF BEAM	SKEW LT/ RT	ANGLE B	HEIGHT C	Original Bridge Drawing No.
Cumberland Pwy.	US68 & KY80		1	16	*8										18080
Cumberland Pwy.	US68 & KY80		2	16	*8										18080
Cumberland Pwy.	US 127		3	20	*10										18215
Cumberland Pwy.	US 127		4	20	*11										18215

*Does not include exit sign.

Sheet 1 of

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
STANDARD BRACKETS FOR ATTACHING SIGNS TO OVERHEAD BRIDGES
ROAD
STATION

CONSTRUCTION PROJECT NO. | MAINTENANCE PROJECT NO. | SB

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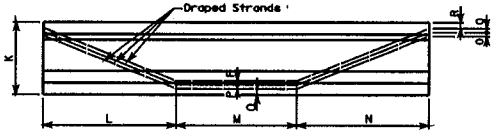
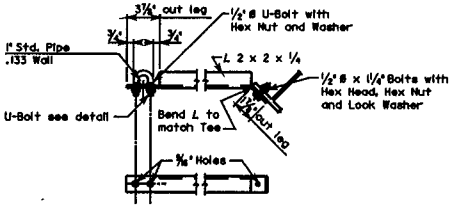
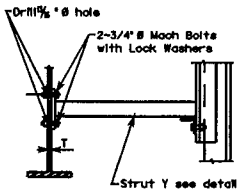
FOR INFORMATION ONLY



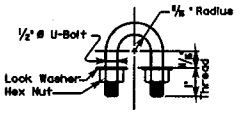
ELEVATION OF BEAM
(Prestressed Concrete I Beam)
Brackets shall be spaced so that bolt holes will not interfere with Draped Strands)



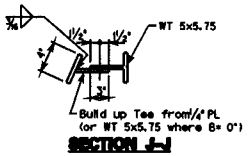
DETAIL FOR STRUT W



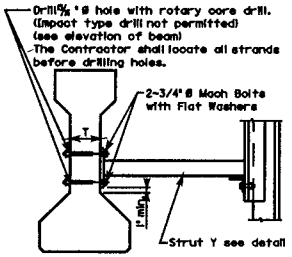
ELEVATION OF BRACKET
(Steel Beam)
Details not shown are the same as for Concrete Beams.



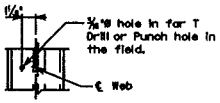
U-BOLT DETAIL



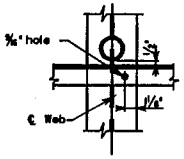
SECTION J-J



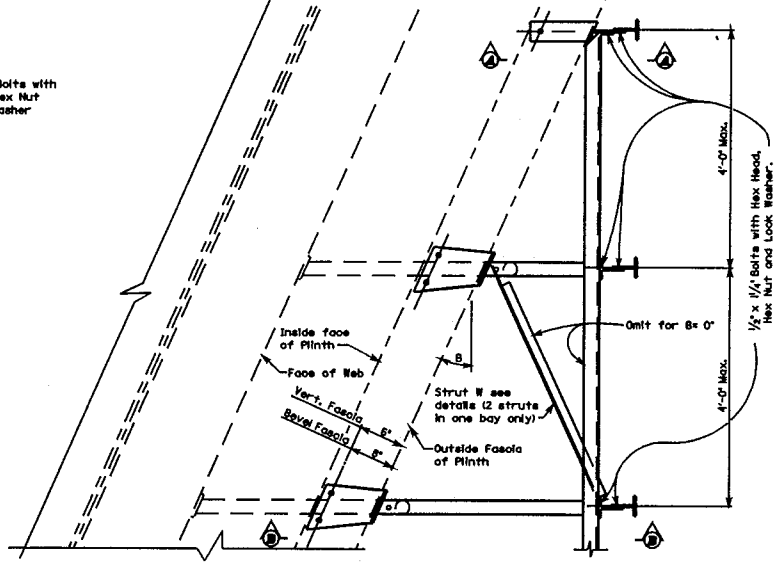
ELEVATION OF BRACKET
(Prestressed Concrete I Beam)
Details not shown are the same as for Concrete Beams.



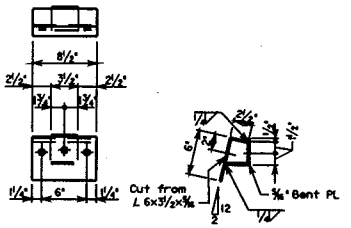
SECTION Q-Q



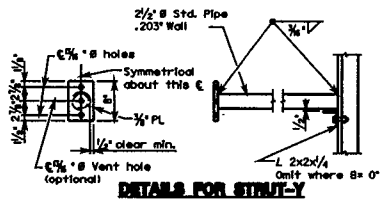
SECTION H-H



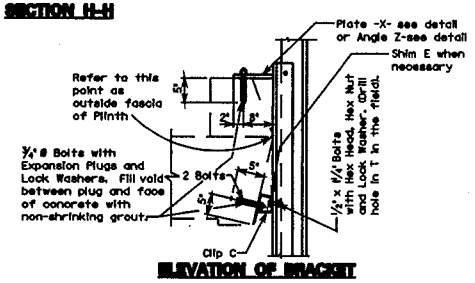
PLAN
(Left Skew as Shown)
(Right Skew opp. Hand)



DETAILS FOR CLIP-C



DETAILS FOR STRUT-Y



ELEVATION OF BRACKET
(Beveled Fascia)
Details not shown are the same as for Vertical Fascia. Clip-C is to be used for 0° Skew Bridges only.

NOTE:

CONTACT DIVISION OF BRIDGE DESIGN FOR FULL SIZE SHEETS. LOCATION OF BRACKET MUST BE REVIEWED BY THE DIVISION OF BRIDGE DESIGN.

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		SB

Sheet

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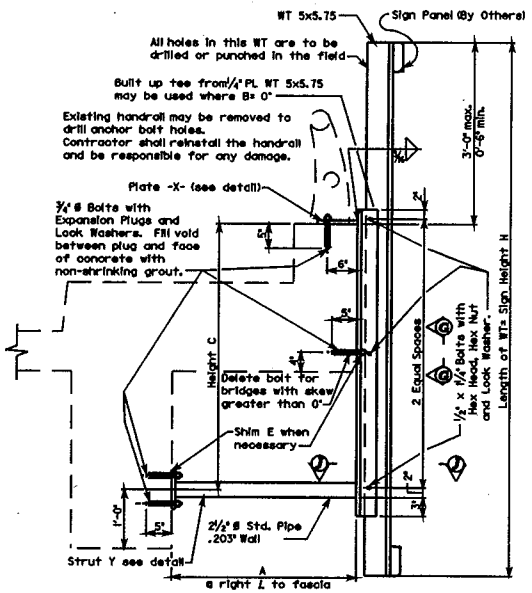
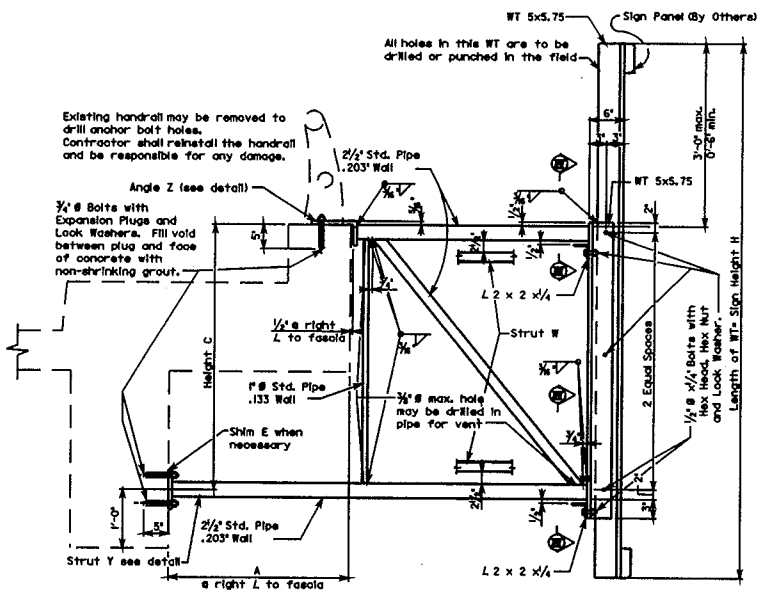
FOR INFORMATION ONLY



ELEVATION A-A OF BRACKET

(Concrete Beam) (Vertical Fascia)

Use when distance between sign and outside fascia of plinth measured along center line of bracket is less than or equal to 1'-6".

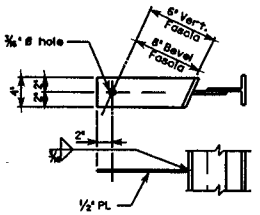


ELEVATION B-B OF BRACKET

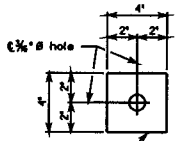
(Concrete Beam) (Vertical Fascia)

Use when distance between sign and outside fascia of plinth measured along center line of bracket is less than or equal to 1'-6". Detail is to be used for bridges with skew greater than 0°.

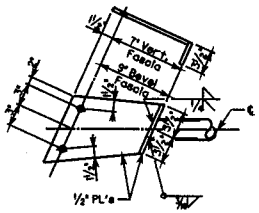
See Sheet 2 for Section G-G, and Section H-H and Section I-I.



DETAILS FOR PLATE X



SHIM E



DETAILS FOR ANGLE Z

NOTE:

CONTACT DIVISION OF BRIDGE DESIGN FOR FULL SIZE SHEETS. LOCATION OF BRACKET MUST BE REVIEWED BY THE DIVISION OF BRIDGE DESIGN.

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Sheet

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SPECIAL NOTE FOR VARIABLE MESSAGE SIGNS

This Special Note will apply when indicated on the plans or in the proposal. Section references herein are to the Department's 2000 Standard Specifications for Road and Bridge Construction.

1.0 DESCRIPTION. Furnish, install, operate, and maintain variable message signs at the locations shown on the plans or designated by the Engineer. When specified in the Contract, the signs and associated equipment become the property of the Department at the completion of the work.

2.0 MATERIALS.

2.1 General. Use LED or flip disk/LED Variable Message Signs Class I, II, or III from the Department's List of Approved Materials.

When signs do not become the property of the Department, unclassified signs may be submitted for approval by the Engineer. When unclassified signs are to become the property of the Department, submit signs to the Division of Materials for approval. Provide shop drawings, specifications, or other data to allow a thorough evaluation when requested. The Engineer may require a daytime and nighttime demonstration. The Engineer will make a final decision within 30 days after all required information is received.

2.2 Trailer and Sign Support. Mount the sign, controls, and all operating and auxiliary equipment on a 2-wheeled steel trailer with the following features:

1) 6,000 lbs GVWR capacity trailer hitch.
2) 3,500 lbs GVWR axle with lubricated wheel bearings for all LED signs.
3) 5,200 lbs GVWR axle with lubricated wheel bearings for all Flip Disk or Hybrid signs.
4) 15-inch trailer wheels equipped with radial tires equal to ST 225/75R15, load range C or better.
5) Locking lug nuts, one per wheel with a master key.
6) Fender for each tire.
7) Metal step pads on all areas of the fenders or frame that personnel must step or stand to operate or maintain the unit.
8) Surge-activated brakes of adequate capacity.
9) All required running lights, brake lights, and turn signals (12 v), with a plug for connecting to a towing vehicle.
10) 2-inch hitch and safety chains.
11) Tongue jack with a wheel, capable of being raised during towing.
12) Outriggers for stability when the unit is in use.
13) Lockable, but easily accessible, protective covers for the batteries, electronic controls, and all other attached equipment susceptible to tampering and weather.
14) 8-foot total unit maximum width when rigged for towing.

The Engineer may allow lesser standards for the trailer and sign support when it will not become the property of the Department.

2.3 Sign and Controls. All signs must:

1) Provide 3-line messages with each line being 8 characters long and at least 18 inches tall. Each character comprises 35 pixels.
2) Provide at least 40 preprogrammed messages available for use at any time. Provide for quick and easy change of the displayed message; editing of the message; and additions of new messages.
3) Provide a controller consisting of:
   a) Keyboard or keypad.
   b) Readout that mimics the actual sign display. (When LCD or LCD type readout is used, include backlighting and heating or otherwise arrange for viewing in cold temperatures.)
   c) Non-volatile memory or suitable memory with battery backup for storing pre-programmed messages.
   d) Logic circuitry to control the sequence of messages and flash rate.
4) Provide a serial interface that is capable of supporting complete remote control ability through land line and cellular telephone operation. Include communication software capable of immediately updating the message, providing complete sign status, and allowing message library queries and updates.
5) Allow a single person easily to raise the sign to a satisfactory height above the pavement during use, and lower the sign during travel.
6) Allow direct wiring for operation of the sign or arrow board from an external power source when desired.
7) Be Highway Orange on all exterior surfaces of the trailer, supports, and controller cabinet.
8) Provide operation in ambient temperatures from -30 to + 120 degrees Fahrenheit during snow, rain and other inclement weather.
9) Provide the driver board as part of a module. All modules are interchangeable, and have plug and socket arrangements for disconnection and reconnection. Printed circuit boards associated with driver boards have a conformable coating to protect against moisture.
10) Provide a sign case sealed against rain, snow, dust, insects, etc. The lens is UV stabilized clear plastic (polycarbonate, acrylic, or other approved material) angled to prevent glare.
11) Provide a flat black UV protected coating on the sign hardware, character PCB, and appropriate lens areas.
12) Provide a photocell control to provide automatic dimming.
13) Allow an on-off flashing sequence at an adjustable rate.
14) Provide a sight to aim the message.
15) Provide a LED display color of approximately 590 nm amber.
16) Provide the following 3-line messages preprogrammed and available for

use when the sign unit begins operation:

/KEEP/RIGHT/⇒⇒⇒/	/MIN/SPEED/**MPH/
/KEEP/LEFT/⇐⇐⇐/	/ICY/BRIDGE/AHEAD/ /ONE
/LOOSE/GRAVEL/AHEAD/	LANE/BRIDGE/AHEAD/
/RD WORK/NEXT/**MILES/	/ROUGH/ROAD/AHEAD/
/TWO WAY/TRAFFIC/AHEAD/	/MERGING/TRAFFIC/AHEAD/
/PAINT/CREW/AHEAD/	/NEXT/***/MILES/
/REDUCE/SPEED/**MPH/	/HEAVY/TRAFFIC/AHEAD/
/BRIDGE/WORK/***0 FT/	/SPEED/LIMIT/**MPH/
/MAX/SPEED/**MPH/	/BUMP/AHEAD/
/SURVEY/PARTY/AHEAD/	/TWO/WAY/TRAFFIC/

*Insert numerals as directed by the Engineer.

Add other messages during the project when required by the Engineer.

2.4 Requirements for Flip-Disc Type Signs. Flip-disc type signs will have the following additional requirements:

1) Disc faces are fluorescent yellow on one side, and flat black on the reverse.
2) Discs are at least 3.5 square inches with a minimum character size of 5 discs horizontally by 7 discs vertically.
3) Discs are designed to operate without lubrication for at least 200 million operations.
4) Line change speed of 600 milliseconds or less.
5) When power is lost, the sign automatically becomes blank or displays a preprogrammed default message.

2.5 Power.

1) Design solar panels to yield 10 percent or greater additional charge than sign consumption. Provide energy backup for 21 days without sunlight and an on-board system charger with the ability to recharge completely discharged batteries in 24 hours.
2) Diesel Power Source. The Department will allow diesel power when the sign does not become the property of the Department. When used, follow all applicable specifications listed for solar signs and provide the following:
   a) At least 24 spare bulbs available on the project for quick replacement of burned out bulbs.
   b) Black light at both top and bottom of each line to illuminate discs for visibility at night or under adverse weather conditions, for flip disk signs.
   c) Diesel generator and electric start assembly, including batteries and a fuel capacity adequate to provide at least 72 hours continuous operation without refueling.

d) Fuel gage.
e) Provide all other specific features, such as bulb size, protection from sun glare, and shock protection for electronics and bulbs, to the satisfaction of the Engineer.

2.6 Signs To Be Retained By The Department. Use only new Class I signs with remote ability on the project. Class II signs may be used when flip disk signs are specified in the Contract. Upon project completion, deliver the sign to the Department's nearest maintenance lot in good repair and in serviceable condition. Include with each delivered sign the following items:

1) One operations manual.
2) Two parts books listing standard electronic part's numbers and manufacturer's stock number, if used.
3) Two service manuals including schematic wiring diagrams.
4) Warranty. Ensure that all unexpired warranties or guarantees on the sign, trailer, or appurtenant equipment remain in force after the sign units are transferred to the Department, until their normal expiration date. Batteries will be heavy-duty 18 month batteries or better, with at least 6 months of their warranty remaining.
5) Keys to the wheel lug nuts.

3.0 CONSTRUCTION. Furnish and operate the variable message signs as designated on the plans or by the Engineer. Use Class I, II, or III signs on roads with a speed limit less than 55 mph. Use Class I or II signs on roads with speed limits 55 mph or greater. Unless the Contract specifies flip-disk signs, use Class I signs on interstates and parkways.

Maintain the sign in proper working order, including repair of any damage done by others, until completion of the project. When the sign becomes inoperative, immediately repair or replace the sign. Repetitive problems with the same unit will be cause for rejection and replacement.

Use only project related messages and messages directed by the Engineer, unnecessary messages lessen the impact of the sign. When no message is needed, but it is necessary to know if the sign is operable, flash only a pixel or disk.

When the sign is not needed, move it where the Engineer specifies.

4.0 MEASUREMENT. The final quantity of Variable Message Sign will be the actual number of individual signs acceptably furnished and operated during the project. The Department will not measure signs replaced due to damage or rejection.

When the Contract states the Department will take ownership of the sign, the Department will consider all equipment specified in this note to be a part of the sign. The Department will not measure delivery for payment and will consider it incidental to the sign.

5.0 PAYMENT. The Department will pay for the Variable Message Signs at the unit price each. The Department will not pay for signs replaced due to damage or rejection. Payment is full compensation for furnishing all materials, labor, equipment, and service necessary to, operate, move, repair, and maintain or replace the variable message signs.

April 18, 2001

PART II

SPECIAL PROVISIONS APPLICABLE TO PROJECT

SPECIAL PROVISION NO.	TITLE	
13	Crash Cushion (4-5-2000)	*

* These Special Provisions are included in the Supplemental Specifications.

PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS
(Copies of each Attached)

1. Schedule of Minimum Wages Established for the Project.

2. Labor and Wage Requirements, applicable to other than Federal-Aid System Contracts. (Rev. 2-16-95)

3. Executive Branch Code of Ethics.

TRANSPORTATION CABINET
DIVISION OF CONTRACT PROCUREMENT
COMPLIANCE SECTION

SHEET ONE

PROJECT WAGE RATES **LETTING: 04-25-2003**

VARIOUS COUNTIES, FDGR 03 0000113
Various Routes in Barren, Metcalfe, Russell and Pulaski Counties only
Toll Plaza Removal, Asphalt Pavement Rehabilitation and Signing

CRAFTS	BASIC HOURLY RATES	FRINGE BENEFIT PAYMENTS COMBINED
Boilermakers	24.65	12.94
Bricklayers	20.35	6.30
Stone Mason	18.95	6.30
Carpenters	18.85	6.30
Cement Masons	18.70	6.30
Electricians	*22.60	6.97

*When workmen are required to work from bosum chairs, trusses, stacks, tanks, scaffolds, catwalks, radio and T.V. towers, structural steel (open, unprotected, unfloored raw steel), and bridges or similar hazardous locations where workmen are subject to a direct fall, except where using JLG's and bucket trucks up to 75 feet: Add 25% to workman's base rate for 50 to 75 feet, and add 50% to workman's base rate for over 75 feet.

Ironworkers: Structural	18.95	6.30
Ironworkers: Reinforcing	18.75	6.30
Painters	20.55	6.30
Piledrivers	18.50	6.30
Plumbers	22.52	6.30
Surveyors:		
Survey Party Chief (Engineer)	12.34	
Survey Party Operatives (Instrumentmen, Rodmen, etc.)	7.21	

Welders - Receive rate for craft in which welding is incidental.

LABORERS:

General laborer, flagman, steam jenny.

BASE RATE 16.90
FRINGE BENEFITS 6.30

Batch truck dumper, deck hand or scow man.

BASE RATE 17.15
FRINGE BENEFITS 6.30

Power driven tool operator of the following: wagon drill, chain saw, sand blaster, concrete chipper, pavement breaker, vibrator, power wheelbarrow, power buggy, sewer pipe layer, bottom men, dry cement handler, concrete rubber, mason tender.

BASE RATE 17.25
FRINGE BENEFITS 6.30

VARIOUS COUNTIES, FDGR 03 0000113

LABORERS: (continued)

Asphalt lute and rakerman, side rail setter.	**BASE RATE** ..... 17.30 **FRINGE BENEFITS** 6.30
Gunnite nozzle man, gunnite operator.	**BASE RATE** ..... 17.40 **FRINGE BENEFITS** 6.30
Tunnel laborer (free air).	**BASE RATE** ..... 17.45 **FRINGE BENEFITS** 6.30
Tunnel mucker (free air)	**BASE RATE** ..... 17.50 **FRINGE BENEFITS** 6.30
Hand blade operator	**BASE RATE** ..... 17.65 **FRINGE BENEFITS** 6.30
Tunnel miner, blaster and driller (free air).	**BASE RATE** ..... 17.85 **FRINGE BENEFITS** 6.30
Caisson worker	**BASE RATE** ..... 18.40 **FRINGE BENEFITS** 6.30
Powderman	**BASE RATE** ..... 18.50 **FRINGE BENEFITS** 6.30
Drill operator of percussion type drills which are both powered and propelled by an independent air supply.	**BASE RATE** ..... 19.70 **FRINGE BENEFITS** 6.30

TRUCK DRIVERS AND RELATED CLASSIFICATIONS:

Truck helper and warehouseman.	**BASE RATE** ..... 17.15 **FRINGE BENEFITS** 6.30
Driver, winch truck and A-Frame when used in transporting materials.	**BASE RATE** ..... 17.25 **FRINGE BENEFITS** 6.30
Driver (semi-trailer or pole trailer), driver (dump truck, tandem axle), driver of distributor.	**BASE RATE** ..... 17.35 **FRINGE BENEFITS** 6.30

PROJECT WAGE RATES **SHEET THREE** **04-25-2003**

VARIOUS COUNTIES, FDGR 03 0000113

TRUCK DRIVERS AND RELATED CLASSIFICATIONS: (continued)

Driver on mixer trucks (all types).	**BASE RATE** ..... 17.40 **FRINGE BENEFITS** 6.30
Truck mechanic	**BASE RATE** ..... 17.45 **FRINGE BENEFITS** 6.30
Driver (3 tons and under), tire changer and truck mechanic helper.	**BASE RATE** ..... 17.48 **FRINGE BENEFITS** 6.30
Driver on pavement breakers.	**BASE RATE** ..... 17.50 **FRINGE BENEFITS** 6.30
Driver (over 3 tons), driver (truck mounted rotary drill).	**BASE RATE** ..... 17.69 **FRINGE BENEFITS** 6.30
Driver, Euclid and other heavy earth moving equipment and Low Boy.	**BASE RATE** ..... 18.26 **FRINGE BENEFITS** 6.30
Greaser on greasing facilities.	**BASE RATE** ..... 18.35 **FRINGE BENEFITS** 6.30

OPERATING ENGINEERS:

Auto patrol, batcher plant, bituminous paver, cable-way, clamshell, concrete mixer (21 cu. ft. or over), concrete pump, crane, crusher plant, derrick, derrick boat, ditching and trenching machine, dragline, dredge engineer, elevator (regardless of ownership when used for hoisting any building material), elevating grader and all types of loaders, hoe-type machine, hoisting engine, locomotive, LeTourneau or carry-all scoop, bulldozer, mechanic, orangepeel bucket, piledriver, power blade, roller (bituminous), roller (earch), roller (rock), scarifier, shovel, tractor shovel, truck crane, well points, winch truck, push dozer, grout pump, high lift, fork lift (regardless of lift height), all types of boom cats, multiple operator, core drill, tow or push boat, A-Frame winch truck, concrete paver, gradeall, hoist, hyster, material pump, pumpcrete, ross carrier, sheep foot, sideboom, throttle-valve man, rotary drill, power generator, mucking machine, rock spreader attached to equipment, scoopmobile, KeCal loader, tower cranes (French, German and other types), hydrocrane, tugger, backfiller gurries, self-propelled compactor, self-contained hydraulic percussion drill.

BASE RATE 20.25
FRINGE BENEFITS 6.30

PROJECT WAGE RATES **SHEET FOUR** **04-25-2003**

VARIOUS COUNTIES, FDGR 03 0000113

OPERATING ENGINEERS: (continued)
All air compressors (200 cu. ft. per min. or greater capacity), bituminous mixer, concrete mixer (under 21 cu. ft.), welding machine, form grader, tractor (50 H.P. and over), bull float, finish machine, outboard motor boat, brakeman, mechanic helper, whirley oiler, tractair and road widening trencher, articulating trucks.

BASE RATE 18.50
FRINGE BENEFITS 6.30

Greaser on grease facilities servicing heavy equipment.

BASE RATE 18.35
FRINGE BENEFITS 6.30

Bituminous distributor, cement gun, conveyor, mud jack, paving joint machine, pump, tamping machine, tractors (under 50 H.P.), vibrator, oiler, air compressors (under 200 cu. ft. per min. capacity), concrete saw, burlap and curing machine, hydro seeder, power form handling equipment, deckhand oiler, hydraulic post driver.

BASE RATE 17.76
FRINGE BENEFITS 6.30

Fringe benefit amounts are applicable for all hours worked except when otherwise noted.

No laborer, workman or mechanic shall be paid at a rate less than that of the General Laborer except those classified as bona fide apprentices registered with the Kentucky State Apprenticeship Supervisor unless otherwise specified in this schedule of wage rates.

These rates are listed pursuant to the Kentucky Determination No. CR-01-II HWY dated August 6, 2002. Apprentices or trainees shall be permitted to work as such subject to Administrative Regulations adopted by the Commissioner of Workplace Standards. Copies of these regulations will be furnished upon request from any interested person.

Before using apprentices on the job the contractor shall present to the Contracting Officer written evidence of registration of such employees in a program of a State apprenticeship and training agency approved and recognized by the U. S. Bureau of Apprenticeship and Training. In the absence of such a State agency, the contractor shall submit evidence of approval and registration by the U. S. Bureau of Apprenticeship and Training.

TRANSPORTATION CABINET
DIVISION OF CONTRACT PROCUREMENT
COMPLIANCE SECTION

PROJECT WAGE RATES **SHEET FIVE 04-25-2003**

VARIOUS COUNTIES, FDGR 03 0000113

The contractor shall submit to the Contracting Officer, written evidence of the established apprenticeship-journeyman ratios and wage rates in the project area, which will be the basis for establishing such ratios and rates for the project under the applicable contract provisions.

TO: EMPLOYERS/EMPLOYEES

PREVAILING WAGE SCHEDULE:

The wages indicated on this wage schedule are the least permitted to be paid for the occupations indicated. When an employee works in more than one classification, the employer must record the number of hours worked in each classification at the prescribed hourly base rate.

OVERTIME:

Overtime is to be paid after an employee works eight (8) hours a day or forty (40) hours a week, whichever gives the employee the greater wages. At least time and one-half the base rate is required for all overtime. A laborer, workman or mechanic and an employer may enter into a written agreement or a collective bargaining agreement to work more than eight (8) hours a calendar day but not more than ten (10) hours a calendar day for the straight time hourly rate. Wage violations or questions should be directed to the designated Engineer or to the undersigned.

Rick Stansel, Director
Division of Contract Procurement
Frankfort, Kentucky 40622

TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS

LABOR AND WAGE REQUIREMENTS APPLICABLE TO OTHER THAN FEDERAL-AID SYSTEM PROJECTS

I. APPLICATION

1. These contract provisions shall apply to all work performed on the contract by the contractor with his own organization and with the assistance of workmen under his immediate superintendence and to all work performed on the contract by piecework, station work or by subcontract. The contractor's organization shall be construed to include only workmen employed and paid directly by the contractor and equipment owned or rented by him, with or without operators.

2. The contractor shall insert in each of his subcontracts all of the stipulations contained in these Required Provisions and such other stipulations as may be required.

3. A breach of any of the stipulations contained in these Required Provisions may be grounds for termination of the contract.

II. NONDISCRIMINATION OF EMPLOYEES

AN ACT OF THE KENTUCKY GENERAL ASSEMBLY TO PREVENT DISCRIMINATION IN EMPLOYMENT KRS CHAPTER 344 EFFECTIVE JUNE 16, 1972

The contract on this project, in accordance with KRS Chapter 344, provides that during the performance of this contract, the contractor agrees as follows:

1. The contractor shall not fail or refuse to hire, or shall not discharge any individual, or otherwise discriminate against an individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, national origin, sex, disability or age (between forty and seventy); or limit, segregate, or classify his employees in any way which would deprive or tend to deprive an individual of employment opportunities or otherwise adversely affect his status as an employee, because of such individual's race, color, religion, national origin, sex, disability or age (between forty and seventy). The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

2. The contractor shall not print or publish or cause to be printed or published a notice or advertisement relating to employment by such an employer or membership in or any classification or referral for employment by the employment agency, indicating any preference, limitation, specification, or discrimination, based on race, color, religion, national origin, sex, disability or age (between forty and seventy), except that such notice or advertisement may indicate a preference, limitation, or specification based on religion, or national origin when religion, or national origin is a bona fide occupational qualification for employment.

3. If the contractor is in control of apprenticeship or other training or retraining, including on-the-job training programs, he shall not discriminate against an individual because of his race, color, religion, national origin, sex, disability or age (between forty and seventy), in admission to, or employment in any program established to provide apprenticeship or other training.

4. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representative of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment. The contractor will take such action with respect to any subcontract or purchase order as the administrating agency may direct as a means of enforcing such provisions, including sanctions for non-compliance.

III. PAYMENT OF PREDETERMINED MINIMUM WAGES

1. These special provisions are supplemented elsewhere in the contract by special provisions which set forth certain predetermined minimum wage rates. The contractor shall pay not less than those rates.

2. The minimum wage determination schedule shall be posted by the contractor, in a manner prescribed by the Department of Highways, at the site of the work in prominent places where it can be easily seen by the workers.

IV. STATEMENTS AND PAYROLLS

1. All contractors and subcontractors affected by the terms of KRS 337.505 to 337.550 shall keep full and accurate payroll records covering all disbursements of wages to their employees to whom they are required to pay not less than the prevailing rate of wages. Payrolls and basic records relating thereto will be maintained during the course of the work and preserved for a period of one (1) year from the date of completion of this contract.

2. The payroll records shall contain the name, address and social security number of each employee, his correct classification, rate of pay, daily and weekly number of hours worked, itemized deductions made and actual wages paid.

3. The contractor shall make his daily records available at the project site for inspection by the State Department of Highways contracting office or his authorized representative.

Periodic investigations shall be conducted as required to assure compliance with the labor provisions of the contract. Interrogation of employees and officials of the contractor shall be permitted during working hours.

Aggrieved workers, Highway Managers, Assistant District Engineers, Resident Engineers and Project Engineers shall report all complaints and violations to the Division of Contract Procurement.

The contractor shall be notified in writing of apparent violations. The contractor may correct the reported violations and notify the Department of Highways of the action taken or may request an informal hearing. The request for hearing shall be in writing within ten (10) days after receipt of the notice of the reported violation. The contractor may submit records and information which will aid in determining the true facts relating to the reported violations.

Any person or organization aggrieved by the action taken or the findings established as a result of an informal hearing by the Division of Contract Procurement may request a formal hearing.

4. The wages of labor shall be paid in legal tender of the United States, except that this condition will be considered satisfied if payment is made by a negotiable check, on a solvent bank, which may be cashed readily by the employee in the local community for the full amount, without discount or collection charges of any kind. Where checks are used for payments, the contractor shall make all necessary arrangements for them to be cashed and shall give information regarding such arrangements.

5. No fee of any kind shall be asked or accepted by the contractor or any of his agents from any person as a condition of employment on the project.

6. No laborers shall be charged for any tools used in performing their respective duties except for reasonably avoidable loss or damage thereto.

7. Every employee on the work covered by this contract shall be permitted to lodge, board, and trade where and with whom he elects and neither the contractor nor his agents, nor his employees shall directly or indirectly require as a condition of employment that an employee shall lodge, board or trade at a particular place or with a particular person.

8. Every employee on the project covered by this contract shall be an employee of either the prime contractor or an approved subcontractor.

9. No charge shall be made for any transportation furnished by the contractor or his agents to any person employed on the work.

10. No individual shall be employed as a laborer or mechanic on this contract except on a wage basis, but this shall not be construed to prohibit the rental of teams, trucks or other equipment from individuals.

No Covered employee may be employed on the work except in accordance with the classification set forth in the schedule mentioned above; provided, however, that in the event additional classifications are required, application shall be made by the contractor to the Department of Highways and (1) the Department shall request appropriate classifications and rates from the proper agency, or (2) if there is urgent need for additional classification to avoid undue delay in the work, the contractor may employ such workmen at rates deemed comparable to rates established for similar classifications provided he has made written application through the Department of Highways, addressed to the proper agency, for the supplemental rates. The contractor shall retroactively adjust, upon receipt of the supplemental rates schedule, the wages of any employee paid less than the established rate and may adjust the wages of any employee overpaid.

11. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any laborer or mechanic in any work-week in which he is employed on such work, to work in excess of eight hours in any calendar day or in excess of forty hours in such work-week unless such laborer or mechanic receives compensation at a rate not less than one and one half times his basic rate of pay for all hours worked in excess of eight hours in any calendar day or in excess of forty hours in such work-week. A laborer, workman or mechanic and an employer may enter into a written agreement or a collective bargaining agreement to work more than eight (8) hours a calendar day but not more than ten (10) hours a calendar day for the straight time hourly rate. This agreement shall be in writing and shall be executed prior to the employee working in excess of eight (8) hours, but not more than ten (10) hours, in any one (1) calendar day.

12. Payments to the contractor may be suspended or withheld due to failure of the contractor to pay any laborer or mechanic employed or working on the site of the work, all or part of the wages required under the terms of the contract. The Department may suspend or withhold payments only after the contractor has been given written notice of the alleged violation and the contractor has failed to comply with the wage determination of the Department of Highways.

13. Contractors and subcontractors shall comply with the sections of Kentucky Revised Statutes, Chapter 337 relating to contracts for Public Works.

Revised 2-16-95

EXECUTIVE BRANCH CODE OF ETHICS

In the 1992 regular legislative session, the General Assembly passed and Governor Brereton Jones signed Senate Bill 63 (codified as KRS 11A), the Executive Branch Code of Ethics, which states, in part:

KRS 11A.040 (6) provides:

> No present or former public servant shall, within six (6) months of following termination of his office or employment, accept employment, compensation or other economic benefit from any person or business that contracts or does business with the state in matters in which he was directly involved during his tenure. This provision shall not prohibit an individual from returning to the same business, firm, occupation, or profession in which he was involved prior to taking office or beginning his term of employment, provided that, for a period of six (6) months, he personally refrains from working on any matter in which he was directly involved in state government. This subsection shall not prohibit the performance of ministerial functions, including, but not limited to, filing tax returns, filing applications for permits or licenses, or filing incorporation papers.

KRS 11A.040 (8) states:

> A former public servant shall not represent a person in a matter before a state agency in which the former public servant was directly involved, for a period of one (1) year after the latter of:
> a) The date of leaving office or termination of employment; or
> b) The date the term of office expires to which the public servant was elected.

This law is intended to promote public confidence in the integrity of state government and to declare as public policy the idea that state employees should view their work as a public trust and not as a way to obtain private benefits.

If you have worked for the executive branch of state government within the past six months, you may be subject to the law's prohibitions. The law's applicability may be different if you hold elected office or are contemplating representation of another before a state agency.

Also, if you are affiliated with a firm which does business with the state and which employs former state executive-branch employees, you should be aware that the law may apply to them.

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, Room 136, Capitol Building, 700 Capitol Avenue, Frankfort, Kentucky 40601; telephone (502) 564-7954.

PART IV

INSURANCE

The Contractor shall carry the following insurance in addition to the insurance required by law:

(1) Contractor's Public Liability Insurance not less than **$100,000.00** for damages arising out of bodily injuries to or death to one person. Not less than **$300,000.00** for damages arising out of bodily injuries to or death to two or more persons.

(2) Contractor's Property Damages Liability Insurance. Not less than **$100,000.00** for all damages arising out of injury or destruction of property in any one accident. Not less than **$300,000.00** for all damages during the policy period.

(3) Contractor's Protective Public Liability and Property Damage Insurance. The contractor shall furnish evidence with respect to operations performed for him by subcontractors that he carries in his own behalf for the above stipulated amounts.

(4) The insurance required above must be evidenced by a Certificate of Insurance and this Certificate of Insurance must contain one of the following statements:

a. "policy contains no deductible clauses."

b. "policy contains a _____ deductible property
(amount)
damage clause but company will pay claim and collect the deductible from the insured."

(5) WORKMEN'S COMPENSATION INSURANCE. The contractor shall furnish evidence of coverage of all his employees or give evidence of self-insurance by submitting a copy of a certificate issued by the Workmen's Compensation Board.

PART V

STATEMENT OF INCOMPLETED WORK

1. Status of Active Prime Contracts. Attached

1. STATUS OF ALL INCOMPLETED PRIME CONTRACTS

All active prime contracts must be reported. This includes prime contracts with public and private owners and joint-ventured contracts. The names of the joint venturers must be shown when reporting these projects. A machine or typed listing reporting the status of each contract is acceptable when attached to this report; however, the total amounts on the itemized listing must be reported in the space provided below:

CONTRACT WITH	PROJECT IDENTIFICATION	PRIME CONTRACT AMOUNT	EARNINGS THROUGH LAST APPROVED ESTIMATE	TOTAL AMOUNT OF WORK REMAINING
TOTAL (Attach Summary if not itemized above)		$	$	$

PART VI

BID ITEMS

BARREN-METCALFE-RUSSELL-PULASKI COUNTIES

PCN: 03-0255

FD GR 03 0000113

Letting: 4/25/2003

THE BIDDER MUST MAKE THE EXTENSIONS AND ADDITIONS
SHOWING TOTAL AMOUNT BID USING FIGURES ONLY

Item No.	Code No.	Item	Approximate Quantity	Unit	Unit Price Dollars	Amount Dollars
1	9863	MEDIAN GRADING	**1.00**	LP SUM	.	.
2	9864	RESHAPE SHOULDER	**1.00**	LP SUM	.	.
3	8100	CONCRETE-CLASS A	**119.00**	CU YD	.	.
4	8150	STEEL REINFORCEMENT	**1,088.00**	LB	.	.
5	2351	GUARDRAIL-STEEL W BEAM-S FACE	**550.00**	LIN FT	.	.
6	2367	GUARDRAIL END TREATMENT TYPE 1	**2.00**	EACH	.	.
7	2369	GUARDRAIL END TREATMENT TY 2A	**2.00**	EACH	.	.
8	2381	REMOVE GUARDRAIL	**1,835.00**	LIN FT	.	.
9	2929	CRASH CUSHION TYPE IX	**2.00**	EACH	.	.
10	2888	CRASH CUSHION TYPE VI D	**4.00**	EACH	.	.
11	6511	PAVE STRIPING-TEMP PAINT-6 IN	**9,055.00**	LIN FT	.	.
12	6515	PAVE STRIPING-PERM PAINT-6 IN	**16,205.00**	LIN FT	.	.
13	6550	PAVE STRIPING-TEMP REM TAPE-W	**4,500.00**	LIN FT	.	.
14	6551	PAVE STRIPING-TEMP REM TAPE-Y	**4,500.00**	LIN FT	.	.
15	6592	PAVEMENT MARKER TYPE V-B W/R	**126.00**	EACH	.	.
16	2775	FLASHING ARROW	**6.00**	EACH	.	.
17	2671	VAR MESSAGE SIGN-PORT 3 LINE	**10.00**	EACH	.	.
18	2562	SIGNS	**1,500.00**	SQ FT	.	.
19	2653	LANE CLOSURE	**12.00**	EA	.	.
20	2014	BARRICADE-TYPE III	**16.00**	EACH	.	.
21	2107	BREAKING AND SEATING PAVEMENT	**1,650.00**	SQ YD	.	.
22	2625	REMOVE HEADWALL	**1.00**	EACH	.	.
23	1310	REMOVE PIPE	**40.00**	LIN FT	.	.
24	2721	REMOVE CONCRETE SIDEWALK	**30.00**	SQ YD	.	.
25	2091	REMOVE PAVEMENT	**1,080.00**	SQ YD	.	.
26	6600	REMOVE PAVEMENT MARKER TYPE V	**86.00**	EACH	.	.
27	2058	REMOVE PCC PAVEMENT	**4,205.00**	SQYD	.	.

BARREN-METCALFE-RUSSELL-PULASKI COUNTIES

PCN: 03-0255

FD GR 03 0000113

Letting: 4/25/2003

THE BIDDER MUST MAKE THE EXTENSIONS AND ADDITIONS
SHOWING TOTAL AMOUNT BID USING FIGURES ONLY

Item No.	Code No.	Item	Approximate Quantity	Unit	Unit Price Dollars	Amount Dollars
28	9861	REMOVE CANOPY	**3.00**	EACH	.	.
29	9862	REMOVE TOLL BOOTH	**16.00**	EACH	.	.
30	9865	REMOVE SIGN	**21.00**	EACH	.	.
31	9867	REMOVE TRAFFIC CONTROL TREADLE	**16.00**	EACH	.	.
32	9868	REMOVE CROSSOVER	**2.00**	EACH	.	.
33	4940	REMOVE LIGHTING (RUSSELL COUNTY)	**1.00**	LP SUM	.	.
34	4940	REMOVE LIGHTING (PULASKI COUNTY)	**1.00**	LP SUM	.	.
35	1000	PERFORATED PIPE-4 INCH	**300.00**	LIN FT	.	.
36	1010	NON-PERFORATED PIPE-4 INCH	**100.00**	LIN FT	.	.
37	1028	PERF PIPE HEADWALL TY 3-4 INCH	**8.00**	EACH	.	.
38	1791	ADJUST MANHOLE FRAME TO GRADE	**3.00**	EACH	.	.
39	1720	RECONSTRUCT INLET	**1.00**	EACH	.	.
40	2598	FABRIC-GEOTEXTILE TYPE III	**10,675.00**	SQ YD	.	.
41	2235	BACKFILLING UNDERCUT	**1,915.00**	CU YD	.	.
42	2677	ASPH PAVE MILLING & TEXTURING	**260.00**	TON	.	.
43	0001	D G A BASE	**100.00**	TON	.	.
44	0216	CL3 ASPH BASE 1.00D PG76-22	**5,220.00**	TON	.	.
45	0332	CL3 ASPH SURF 0.50A PG76-22	**1,230.00**	TON	.	.
46	2650	MAINTAIN AND CONTROL TRAFFIC (BARREN COUNTY)	**1.00**	LP SUM	.	.
47	2650	MAINTAIN AND CONTROL TRAFFIC (METCALFE COUNTY)	**1.00**	LP SUM	.	.
48	2650	MAINTAIN AND CONTROL TRAFFIC (RUSSELL COUNTY)	**1.00**	LP SUM	.	.
49	2650	MAINTAIN AND CONTROL TRAFFIC (PULASKI COUNTY)	**1.00**	LP SUM	.	.

BARREN-METCALFE-RUSSELL-PULASKI COUNTIES

PCN: 03-0255

FD GR 03 0000113

Letting: 4/25/2003

THE BIDDER MUST MAKE THE EXTENSIONS AND ADDITIONS
SHOWING TOTAL AMOUNT BID USING FIGURES ONLY

Item No.	Code No.	Item	Approximate Quantity	Unit	Unit Price Dollars	Amount Dollars
50	2650	MAINTAIN AND CONTROL TRAFFIC (BARREN COUNTY) (I-65)	**1.00**	LP SUM	.	.
51	2676	MOBILIZATION FOR MILL & TEXT (BARREN COUNTY)	**1.00**	LP SUM	.	.
52	2676	MOBILIZATION FOR MILL & TEXT (METCALFE COUNTY)	**1.00**	LP SUM	.	.
53	2676	MOBILIZATION FOR MILL & TEXT (RUSSELL COUNTY)	**1.00**	LP SUM	.	.
		SIGNING QUANTITIES			.	.
54	6440	GMSS GALV STEEL TYPE B	**2,945.00**	LB	.	.
55	6490	CLASS A CONCRETE FOR SIGNS	**5.58**	CU YD	.	.
56	6405	SBM ALUMINUM PANEL SIGNS	**1,069.00**	SQ FT	.	.
57	6406	SBM ALUM SHEET SIGNS .080 INCH	**68.00**	SQ FT	.	.
58	6227	REM SIGN BR ATTACH BRACKETS	**12.00**	EACH	.	.
59	6451	REMOVE SIGN SUPPORT BEAM	**97.00**	EACH	.	.
60	6448	SIGN BRIDGE ATTACHMENT BRACKET	**4.00**	EACH	.	.
61	2569	DEMOBILIZATION	**1.00**	LP SUM	.	.
62		**TOTAL BID**				$.

PART VII

CERTIFICATIONS

1.	Provisions Relative to Senate Bill 258 (1994)	Attached
2.	Non-Collusion Certification	Attached
3.	Certification of Bid Proposal	Attached

PROVISIONS RELATIVE TO SENATE BILL 258 (1994)

During the performance of the contract, the contractor agrees to comply with applicable provisions of:

1.	KRS 136	Corporation and Utility Taxes
2.	KRS 139	Sale and Use Taxes
3.	KRS 141	Income Taxes
4.	KRS 337	Wages and Hours
5.	KRS 338	Occupational Safety and Health of Employees
6.	KRS 341	Unemployment Compensation
7.	KRS 342	Workers Compensation

Any final determinations of a violation by the contractor within the previous five (5) years pursuant to the applicable statutes above are revealed as follows:

_____

_____

_____

_____

_____

_____

_____

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NON-COLLUSION CERTIFICATION

COMMONWEALTH OF KENTUCKY
COUNTY _____
PROJECT NO. _____

I, _____, _____, under
(Name of officer signing certification) (Title)

penalty of perjury under the laws of the United States, do hereby certify that

_____,
(Insert name of Individual, Joint Venture, Co-partnership, or Corporation submitting bid)

its agent, officers or employees have not directly or indirectly entered into any agreement, participated in any collusion, or otherwise taken action in restraint of free competitive bidding in connection with this proposal.

_____
(Signature)

_____
(Title)

REVISED: 8-23-89

NON-COLLUSION CERTIFICATION

COMMONWEALTH OF KENTUCKY
COUNTY _____
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_____
(Signature)

_____
(Title)

REVISED: 8-23-89

CERTIFICATION OF BID PROPOSAL

We (I) propose to furnish all labor, equipment and materials necessary to construct and/or improve the subject project in accordance with the plans, the Transportation Cabinet's Standard Specifications for Road and Bridge Construction, current edition, special provisions, notes applicable to the project as indicated herein and all addenda issued on this project subsequent to purchase of proposal.

We (I) attach a bid proposal guaranty as provided in the special provisions in an amount not less than 5% of the total bid. We agree to execute a contract in accordance with this bid proposal within 15 calendar days after the receipt of the notice of award for the project.

We (I) have examined the site of proposed work, project plans, specifications, special provisions, and notes applicable to the project referred to herein. We understand that the quantities shown herein are estimated quantities subject to increase or decrease as provided in the specifications.

_____

Name of Contracting Firm

BY: _____

Authorized Agent Title

_____

Address City State Zip Code

_____

Telephone Number

When two or more organizations bid as a joint venture, enter names of each organization and an authorized agent for each organization must sign above.